

XXX xxx, 2016

Mr. Mark Heilman  
Plant Manager  
CertainTeed Corporation  
200 CertainTeed Road  
Oxford, North Carolina 27565

SUBJECT: Air Quality Permit No. 03663T31 30  
Facility ID: 3900040  
CertainTeed Corporation  
Oxford, Granville County  
Fee Class: Title V  
PSD Status: Minor

Dear Mr. Heilman:

In accordance with your completed Air Quality Permit Application for a Significant Modification in accordance with 15A NCAC 2Q .0501(c)(2)/Renewal/502(b)(10) of your Title V permit received XXX xxx, 2016, we are forwarding herewith Air Quality Permit No. 03663T31 to CertainTeed Corporation in Oxford, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final

and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

The PSD minor source baseline date has not been triggered for any pollutant in Granville County.

This Air Quality Permit shall be effective from XXX xxx, 2016 until XXX xxx, 2021, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Gautam Patnaik at (919) 707-8735 or [gautam.patnaik@ncdenr.gov](mailto:gautam.patnaik@ncdenr.gov).

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section  
Division of Air Quality, NCDENR

Enclosure

cc: Heather Ceron, EPA Region 4  
Raleigh Regional Office  
Connie Horne (cover letter only)  
Central Files

## Attachment I

### Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IMSMT	modified sealant mix tank, controlled by an electrostatic precipitator (CDESP) or mist eliminator (CDME) – control devices operated in parallel
IDELF	dry end loading of fiberglass
I2PW	two parts washers
IGU	glue usage
ISRP	propane-fired shrink wrap process
IGML	Grand Manor off-line laminator
IIL	Independence off-line laminator
IAL	Accessory off-line laminator
IV	portable vacuum
IN2FO	75,000 gallon No. 2 fuel oil storage tank
IN6FO	75,000 gallon No. 6 fuel oil storage tank
IFCT	ferric chloride tank
I2N2FO	two small diesel fuel tanks
IK	small kerosene tank
I2BA	two bulk adhesive tanks for off-line laminators
I2S	five Sweco
IGUHS	granule unloading, handling, and storage
IMA4	plasticizer preheat tank
IGT	granule trans loader
IMA6	plasticizer storage totes
IFWP	No. 2 fuel oil fired fire water pump, rated 175 horsepower
IRC	Electric oven for Line 8 ridge cap production
IHEAT	three electric circulation heaters
IPUMP	five 200 gpm Viking pumps
Ilaser8	Line 8 laser etching
IRHeater	Infrared heater
I-ESFST-burners	Two natural gas-fired burners (less than 10 MMBtu/hr, each) for tanks (ESFST3 and ESFST4).
IESEDG	2,500 kw diesel-fired emergency generator with a “nonroad engine.” <sup>NI</sup>

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2D .1100 “Control of Toxic Air Pollutants” or 15A NCAC 2Q .0711 “Emission Rates Requiring a Permit”.
3. For additional information regarding the applicability of GACT see the DAQ page titled “The Regulatory Guide for Insignificant Activities/Permits Exempt Activities”. The link to this site is as follows: <http://daq.state.nc.us/permits/insig/>

<sup>NI</sup> Rental “nonroad engine” (reference application # 3900040.13B)

**ATTACHMENT II:****Summary of Changes to the Permit (No. 03663T31)**

<b>Page(s)</b>	<b>Section</b>	<b>Description of Change(s)</b>
Several	Source Table	No. 6 fuel were removed from all combustion sources
Several	Source Table	No. 2 were removed from all combustion sources except boilers ESB1 And ESB2
12	Source Table	2,500 kw diesel-fired emergency generator removed and added to insignificant activities list as IESEDG
26	2.1 F.,	No. 2 and No. 6 fuel oil removed from all combustion sources
29	2.1 F. 4.,	Removed rule 02D .0524 Dc
30	2.1 F. 5. b.,	Emission limits removed for Case-by-Case MACT
30	2.1 F. 5. c.,	Compliance testing removed for Case-by-Case MACT
30	2.1 F. 5. f.,	Notification of Compliance Status removed for Case-by-Case MACT
31	2.1 F. 5. h.,	Last effective date of 02D Case-by-Case MACT added
31 through 34	2.1 F. 6.,	MACT Subpart DDDDD for existing gas 1 units with a heat input capacity of less than 5 million Btu per hour
34 through 37	2.1 F. 7.,	MACT Subpart DDDDD for existing sources designed to burn gas 1 fuels with a heat input capacity greater than 10 million Btu per Btu per hour
37 through 41	2.1 F. 8.,	MACT Subpart DDDDD for existing sources designed to burn gas 1 fuels with a heat input capacity equal to or greater than 10 million Btu per hour
50	2.2 i., 1. i.,	MACT Subpart LLLLL – Operating limit for combustion temperature of the afterburner (ID No. CDAFB) changed from 1,565 to 1,463 degrees Fahrenheit
53 through 56	2.2 ii., 1.,	SO2 PSD avoidance limits removed.
60 through 61	2.2 ii., 4.,	PM10 PSD avoidance limit added
61	2.2 iii.,	Toxics limits modified.
63 through 72	General Conditions	Updated to most recent shell version (v 4.0).



State of North Carolina  
Department of Environmental Quality  
Division of Air Quality

## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03663T30	03663T29	XXX xxx, 2016	XXX xxx, 2021

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit..

<b>Permittee:</b>	<b>CertainTeed Corporation</b>
<b>Facility ID:</b>	<b>3900040</b>
<b>Facility Site Location:</b>	<b>200 CertainTeed Road</b>
<b>City, County, State, Zip:</b>	<b>Oxford, Granville County, North Carolina, 27565</b>
<b>Mailing Address:</b>	<b>200 CertainTeed Road</b>
<b>City, State, Zip:</b>	<b>Oxford, Granville County, North Carolina, 27565</b>
<b>Application Number:</b>	<b>3900040.13B, 3900040.14A and 3900040.15A</b>
<b>Complete Application Date:</b>	<b>xxx, 2016, xxx, 2014 and xxx, 2015</b>
<b>Primary SIC Code:</b>	<b>2952</b>
<b>Division of Air Quality,</b>	<b>Raleigh Regional Office</b>
<b>Regional Office Address:</b>	<b>3800 Barrett Drive</b>
	<b>Raleigh, North Carolina, 27609</b>

Permit issued this xx day of XXX, 2016

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William D. Willets, P.E., Chief, Air Permitting Section  
By Authority of the Environmental Management Commission

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## SECTION 1- PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ESBS1 NSPS UU MACT LLLL	Blowstill No. 1	CDAFB	Natural gas <del>No. 2 fuel oil</del> -fired afterburner; not greater than 25 million Btu per hour heat input
ESBS2 NSPS UU MACT LLLL	Blowstill No. 2		
ESBS3 NSPS UU MACT LLLL	Blowstill No. 3		
ESLC1 NSPS UU MACT LLLL	Line No. 1 fiberglass mat coater	CDESP	Electrostatic Precipitator; 3,406 square feet of collecting plate area
		-or-	-or-
ESLC2 NSPS UU MACT LLLL	Line No. 2 fiberglass mat coater	CDME	Mist Eliminator
ESMA1	Modified asphalt or sealant batch process tank		
ESMA2	Modified asphalt or sealant mix process tank		
ESMA3 NSPS UU MACT LLLL	Modified asphalt or sealant recirculation tank; 900 gal		
ESSEA1 MACT LLLL	Sealant day tank No. 1; 1,600gal		
ESSEA2 MACT LLLL	Sealant day tank No. 2; 1,600 gal		
ESSA1	Line No. 1 sealant applicator pan		

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
<b>MACT</b> <b>LLLLL</b>  ESSA2 <b>MACT</b> <b>LLLLL</b>  ESWIP1 <b>MACT</b> <b>LLLLL</b>  ESMS2 <b>NSPS UU</b> <b>MACT</b> <b>LLLLL</b>  ESHM1 <b>MACT</b> <b>LLLLL</b>  ESHM2 <b>MACT</b> <b>LLLLL</b>	Line No. 2 sealant applicator pan   Line No. 1 overlay inking pan   Modified sealant recirculation tank; 500 gal  Limestone/asphalt mixer No. 1   Limestone/asphalt mixer No. 2		
ESLA3 <b>MACT</b> <b>LLLLL</b>  ESLA4 <b>MACT</b> <b>LLLLL</b>  ESLA5 <b>MACT</b> <b>LLLLL</b>  ESLAT6 <b>MACT</b> <b>LLLLL</b> <b>NSPS UU</b>  ESLAT7 <b>MACT</b> <b>LLLLL</b> <b>NSPS UU</b>  ESMA7	Laminator pan for Line No. 1   Laminator pan for Line No. 1   Laminator pan for Line No. 1   One 80 gallon laminate use tank for Line No. 1   One 140 gallon laminate use tank for Line No. 1   One 800 gallon laminate day tank	**CDFTR2	Ceco filter



<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
<b>MACT</b> <b>LLLL</b> <b>NSPS UU</b>  <b>ESSA6</b> <b>MACT</b> <b>LLLL</b>  <b>ESSEA6</b> <b>MACT</b> <b>LLLL</b> <b>NSPS UU</b>  <b>ESMA9</b> <b>MACT</b> <b>LLLL</b> <b>NSPS UU</b>	for Line No. 1  One sealant applicator pan for Line No. 1  One 80 gallon sealant use tank for Line No. 1  One 800 gallon sealant day tank for Line No. 1		
<b>ESNLP A2</b>	Nail paint line applicator for Line No. 1	N/A	N/A
<b>ESMA5</b> <b>MACT</b> <b>LLLL</b>  <b>ESFT1</b> <b>MACT</b> <b>LLLL</b>  <b>ESFT2</b> <b>MACT</b> <b>LLLL</b>  <b>ESFT3</b> <b>MACT</b> <b>LLLL</b>  <b>ESFST1</b> <b>MACT</b> <b>LLLL</b>  <b>ESFST2</b> <b>MACT</b> <b>LLLL</b>  <b>ESST1</b> <b>MACT</b> <b>LLLL</b>	Plasticizer or asphalt storage tank (14,000 gallons capacity)  No. 1 flux preheat tank  No. 2 flux preheat tank  No. 3 flux preheat tank  No. 1 flux storage tank; 150,000 gal  No. 2 flux storage tank; 150,000 gal  No. 1 saturant tank; 40,000gal	<b>CDME3</b> <b>-and-</b> <b>CDRTO</b>  <b>-</b> <b>or-</b>  <b>CDESP</b>  <b>-or-</b>  <b>CDME</b>	Mist Eliminator, followed by a <b>-and-</b> Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input  <b>-or-</b>  Electrostatic Precipitator; 3,406 square feet of collecting plate area  <b>-or-</b>  Mist Eliminator

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ESSDT MACT LLLLL	Sealant tank; 30,000 gal		
ESCT1 MACT LLLLL	Coating tank No. 1; 30,000 gal		
ESCT2 MACT LLLLL	Coating tank No. 2; 30,000 gal		
ESCT3 MACT LLLLL	Coating tank No. 3; 30,000 gal		
ESCT4 MACT LLLLL	Coating tank No. 4; 40,000 gal		
ESFST3 and ESFST4 NSPS UU MACT LLLLL	Two asphalt flux storage tanks (1,000,000 gallons capacity each)	CDME3 -and- CDRTO  -or-  CDESP  -or-  CDME	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input  -or-  Electrostatic Precipitator; 3,406 square feet of collecting plate area  -or-  Mist Eliminator

ESAC20 NSPS UU MACT LLLL	Line No. 3 AC-20 asphalt storage tank; 30,000 gal	CDME3 -and- CDRTO	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input
ESLC3 NSPS UU MACT LLLL	Line No. 3 fiberglass mat coater		
ESMA8 NSPS UU MACT LLLL	Line No. 3 laminate swell tank		
ESLAT3 NSPS UU MACT LLLL	Line No. 3 laminate adhesive day tank		
ESLAT4 NSPS UU	Line No. 3 laminate adhesive use tank		
ESMA10 NSPS UU MACT LLLL	Line No. 3 sealant swell tank		
ESSEA3 NSPS UU MACT LLLL	Line No. 3 sealant adhesive day tank		
ESSEA4 NSPS UU	Line No. 3 sealant adhesive use tank		
ESSA5 NSPS UU MACT LLLL	Line No. 3 sealant applicator		
ESLA2 NSPS UU MACT LLLL	Line No. 3 laminating adhesive applicator		
ESHM3 MACT LLLL	Line No. 3 horizontal mixer		
ESVM3	Line No. 3 vertical mixer		

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
<b>MACT LLLL</b>			
ESLA1 <b>MACT LLLL</b>	Line No. 2 laminating adhesive applicator wheel	CDFTR	Coalescing Air Filter
ESSA3 <b>MACT LLLL</b>	Line No. 2 sealant applicator gun		
ESSA4 <b>MACT LLLL</b>	Line No. 2 sealant applicator pan		
<b>ES-HLS Handling System</b>			
ESPSTS <b>NSPS UU</b>	Pneumatic sand transfer system	CDDC11	Baghouse (200 square feet of filter area)
ESGS <b>NSPS UU</b>	Storage silo	CDDC11	Baghouse (200 square feet of filter area)
ESSTS <b>NSPS UU</b>	Sand truck dump and conveyor system	CDDC25	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESSS1 <b>NSPS UU</b>	Sand silo No. 1	CDDC25	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESSS2 <b>NSPS UU</b>	Sand silo No. 2	CDDC25	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESBSB1	Line No. 1 sand transfer system	CDDC22	Baghouse (maximum air-to-cloth ratio, 1:1)
ESBSB2	Line No. 2 sand transfer system	CDDC23	Baghouse (maximum air-to-cloth ratio, 1:1)
ESBSB3	Line No. 3 sand transfer system	CDDC17	Baghouse (maximum air-to-cloth ratio, 1:1)
<b>Granule and Headlap Systems</b>			
ESHLT <b>NSPS UU</b>	Headlap unload and transfer system	CDDC16 -or- CDDC24	Baghouse (maximum air-to-cloth ratio, 4.9:1)  Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESHLS <b>NSPS UU</b>	Two (2) headlap storage silos	CDDC24	Baghouse (maximum air-to-cloth ratio, 4.8:1)
<b>Talc Handling System</b>			
ESRTC2	Reclaim talc collector	CDDC6	Baghouse (193 square feet of filter area)

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ESPTR2	Pneumatic talc receiver No. 2	CDDC4	Baghouse (64 square feet of filter area)
ESTSV	Talc silo	CDDC8	Baghouse (151 square feet of filter area)
<b>Limestone Processing System</b>			
ESLSH NSPS 000	Railcar/truck dump pit, Vibrating conveyor, Bucket elevator, Belt conveyor, Rock silo No. 1, and Rock silo No. 2	N/A	N/A
ESCM1 NSPS 000	Crushing mill/product cyclone No. 1	CDDC12	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCMH1	Natural gas/ <del>No. 2 fuel oil</del> direct fired heater for Crushing Mill No. 1; 3.5 million Btu per hour heat input	CDDC12	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCM2 NSPS 000	Crushing mill/product cyclone No. 2	CDDC13	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCMH2	Natural gas/ <del>No. 2 fuel oil</del> direct fired heater for Crushing Mill No. 2; 3.5 million Btu per hour heat input	CDDC13	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCM3 NSPS 000	Crushing mill/product cyclone No. 3	CDDC19	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESCMH3	Natural gas/ <del>No. 2 fuel oil</del> direct fired heater for Crushing Mill No. 3; 7.0 million Btu per hour heat input	CDDC19	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESLSV1 ESLSV2 ESLSV3 NSPS UU	Crushed limestone silo No. 1 Crushed limestone silo No. 2 Crushed limestone silo No. 3	CDDC18 -or- CDDC7	Baghouse (maximum air-to-cloth ratio, 3.7:1) -or- Baghouse (670 square feet of filter area)
ESLUBV1	Line No. 1/Line No. 2 limestone use bin	CDDC2	Baghouse (193 square feet of filter area)
ESLUBV2	Line No. 3 limestone use bin	CDDC15	Baghouse (maximum air-to-cloth ratio, 3.8:1)
ESHFB	Line No. 3 limestone hot filler bin	CDDC15	Baghouse (maximum air-to-cloth ratio, 3.8:1)

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ESLFH	Natural gas/ <del>No. 2 fuel oil</del> direct fired limestone filler heater; 8.7 million Btu per hour heat input with 48 inch product collection cyclone	CDDC1	Baghouse (2,000 square feet of filter area)
ESLFH2	Line No. 3 filler heater and transfer system	CDDC15	Baghouse (maximum air-to-cloth ratio, 3.8:1)
<b>Miscellaneous Sources</b>			
ESDML3	Line No. 3 dry mat looper	CDDC14	Baghouse (maximum air-to-cloth ratio, 5.1:1)
ESBSP1	Line No. 1 surfacing/backsurfacing process	CDDC9	Baghouse (2,490 square feet of filter area)
ESBSP2	Line No. 2 surfacing/backsurfacing process	CDDC10	Baghouse (1,937 square feet of filter area)
ESBSP3	Line No. 3 surfacing/backsurfacing process	CDDC14	Baghouse (maximum air-to-cloth ratio, 5.1:1)
ESCS1	Line No. 1 cooling section	N/A	N/A
ESCS2	Line No. 2 cooling section	N/A	N/A
ESCS3	Line No. 3 cooling section	N/A	N/A
ESINK	Inkjet package labeling	N/A	N/A
ESINK2	Line No. 3 inkjet package labeling	N/A	N/A
ESNLPA	Line No. 3 nail line paint applicator	N/A	N/A
<b>Line No. 8 – Polypropylene Roofing Product Manufacturing</b>			
L8RMH	Raw Material Handling, including conveyors, an electrical/desiccant dryer, and weigh blender	L8RMHDC	Baghouse (maximum air-to-cloth ratio, 5:1)
L8	Extrusion Process, including ten (10) core/cap extruder pairs	N/A	N/A
L8PG	Polystyrene grinder	CDDC26	Baghouse (760 square feet of filter area)
<b>Indirect-Fired Combustion Sources</b>			
ESPH1 <b>2D .1109</b> <b>case-by-case</b> <b>MACT</b>	Natural gas/ <del>No. 2 and No. 6 fuel oil</del> fired flux preheater No. 1; 11.3 million Btu per hour heat input	N/A	N/A
ESPH2 <b>2D .1109</b> <b>case-by-case</b> <b>MACT</b>	Natural gas/ <del>No. 2 and No. 6 fuel oil</del> fired flux preheater No. 2; 11.3 million Btu per hour heat input	N/A	N/A

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ESSH1 2D .1109 case-by-case MACT	Natural gas <del>/No. 2 and No. 6 fuel oil</del> -fired saturant heater No. 1; 11.3 million Btu per hour heat input	N/A	N/A
ESB1 2D .1109 case-by-case MACT	Natural gas/No. 2 <del>and No. 6</del> fuel oil-fired boiler No. 1; 16.7 million Btu per hour heat input	N/A	N/A
ESB2 2D .1109 case-by-case MACT	Natural gas/No. 2 <del>and No. 6</del> fuel oil-fired boiler No. 2; 16.7 million Btu per hour heat input	N/A	N/A
ESSCH1 2D .1109 case-by-case MACT	Natural gas <del>/No. 2 fuel oil</del> -fired shingle coating heater No. 1; 4.7 million Btu per hour heat input	N/A	N/A
ESSCH2 2D .1109 case-by-case MACT	Natural gas <del>/No. 2 fuel oil</del> -fired shingle coating heater No. 2; 4.7 million Btu per hour heat input	N/A	N/A
ESSCH3 2D .1109 case-by-case MACT	Natural gas <del>/No. 2 and No. 6 fuel oil</del> -fired shingle coating heater No. 3; 3.75 <del>11.3</del> million Btu per hour heat input	N/A	N/A
ESHOH2 2D .1109 case-by-case MACT	Natural gas <del>/No. 2 fuel oil</del> -fired hot oil heater No. 2; 5.0 million Btu per hour heat input	N/A	N/A
ESHOH4 NSPS DC 2D .1109 case-by-case MACT	Natural gas <del>/No. 2 fuel oil</del> -fired hot oil heater No. 4; 15.0 million Btu per hour heat input	N/A	N/A
ESHOH1 2D .1109 case-by-case MACT	Natural gas, <del>No. 2 fuel oil</del> -fired hot oil heater No.1 (2.1 million Btu per hour heat input)	N/A	N/A
ESBLR1	Natural gas/No. 2 fuel oil-fired boiler (less than 10.0 million Btu per hour heat input)	NA	NA
<b>Other Utility</b>			

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESEDG NSPS III MACT LLLL	2,500 kw diesel-fired emergency generator	N/A	N/A

\*These emission sources and/or control devices (ID Nos. ESMA1, ESMA2, ESMA3, ESMA5, L8PG, and CDDC26) are listed as a minor modification per 15A NCAC 2Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on (November 22, 2015). Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .0515(f).

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

- A. Afterburner (ID No. CDAFB) on:
- Blowstill No. 1 (ID No. ESBS1);
  - Blowstill No. 2 (ID No. ESBS2); and,
  - Blowstill No. 3 (ID No. ESBS3).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<b>Affected Source:</b> Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
Visible emissions	<b>Affected Source:</b> Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
HAPs	See Section 2.2 i. 1. (Multiple Emission Sources-MACT, Existing Affected Asphalt Processing Facility)	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)
SO <sub>2</sub>	See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO <sub>x</sub>	See Section 2.2 ii. 2. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	See Section 2.2 ii.3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
TAPs	See Section 2.2 iii.(Multiple Emission Sources-Control of Toxic Air Pollutants) <b>state-enforceable only</b>	15A NCAC 2D .1100
TAPs	See Section 2.2 iv. 1 (Multiple Emission Sources-Toxic Pollutant Exemption rates) <b>STATE-ENFORCEABLE ONLY</b>	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711



Regulated Pollutant	Limits/Standards	Applicable Regulation
VOC	See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) STATE-ENFORCEABLE ONLY	15A NCAC 2D .1806

**1. 15A NCAC 2D .0524: NSPS FOR ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE (40 CFR 60, Subpart UU)**

- a. The Permittee shall not allow to be discharged into the atmosphere from Blowstill No. 1, 2, and 3 (**ID Nos. ESBS1, ESBS2, and ESBS3**):
  - i. Particulate matter in excess of 0.67 kg/Mg (1.3 lb/ton) of asphalt charged to the still when a catalyst is added to the still; and
  - ii. Particulate matter in excess of 0.60 kg/Mg (1.2 lb/ton) of asphalt charged to the still during blowing without a catalyst.
- b. The Permittee shall not allow to be discharged into the atmosphere from Blowstill No. 1, 2, and 3 (**ID Nos. ESBS1, ESBS2, and ESBS3**) exhaust gases with opacity greater than zero percent.

**Testing/Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. Pursuant to 40 CFR 63.8681, blowstills that are subject to 40 CFR 60, Subpart UU *and* 40 CFR 63, Subpart LLLLL (Asphalt Roofing MACT) are only required to comply with the provisions of the MACT. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these requirements of Section 2.2.A. i, 1., of this permit are not met.

**B. Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:**

Line No. 1 fiberglass mat coater (ID No. ESLC1);  
 Line No. 2 fiberglass mat coater (ID No. ESLC2);  
 Modified asphalt or sealant batch process tank (ID No. ESMA1);  
 Modified asphalt or sealant mix process tank (ID No. ESMA2);  
 Modified asphalt or sealant recirculation tank (ID No. ESMA3);  
 Sealant day tank No. 1 (ID No. ESSEA1);  
 Sealant day tank No. 2 (ID No. ESSEA2);  
 Line No. 1 sealant applicator pan (ID No. ESSA1);  
 Line No. 2 sealant applicator pan (ID No. ESSA2);  
 Line No. 1 overlay inking pan (ID No. ESWIP1);  
 Modified sealant recirculation tank (ID No. ESMS2);  
 Limestone/asphalt mixer No. 1 (ID No. ESHM1); and,  
 Limestone/asphalt mixer No. 2 (ID No. ESHM2).

**Mist Eliminator (ID No. CDME3) followed by a Regenerative Thermal Oxidizer (CDRTO) -OR- Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:**

Plasticizer or Asphalt storage tank (ID No. ESMA5)  
 No. 1 flux preheat tank (ID No. ESFT1);  
 No. 2 flux preheat tank (ID No. ESFT2);  
 No. 3 flux preheat tank (ID No. ESFT3);  
 Flux storage tank No. 1 (ID No. ESFST1);  
 Flux storage tank No. 2 (ID No. ESFST2);  
 No. 1 saturant tank (ID No. ESST1);  
 Sealant tank (ID No. ESSDT);  
 Coating tank No. 1 (ID No. ESCT1);  
 Coating tank No. 2 (ID No. ESCT2);  
 Coating tank No. 3 (ID No. ESCT3); and,  
 Coating tank No. 4 (ID No. ESCT4).  
 Two asphalt flux storage tanks (ID Nos. ESFST3 and ESFST4)

**Mist Eliminator (ID No. CDME3) followed by a Regenerative Thermal Oxidizer (CDRTO) on:**

Line No. 3 AC-20 asphalt tank (ID No. ESAC20);

**Line No. 3 fiberglass mat coater (ID No. ESLC3);**  
**Line No. 3 laminate swell tank (ID No. ESMA8);**  
**Line No. 3 laminate adhesive day tank (ID No. ESLAT3);**  
**Line No. 3 laminate adhesive use tank (ID No. ESLAT4);**  
**Line No. 3 sealant swell tank (ID No. ESMA10);**  
**Line No. 3 sealant adhesive day tank (ID No. ESSEA3);**  
**Line No. 3 sealant adhesive use tank (ID No. ESSEA4);**  
**Line No. 3 sealant applicator (ID No. ESSA5);**  
**Line No. 3 laminating adhesive applicator (ESLA2);**  
**Line No. 3 horizontal mixer (ID No. ESHM3); and,**  
**Line No. 3 vertical mixer (ID No. ESVM3).**

**Coalescing Air Filter (ID No. CDFTR) on:**

**Line No. 2 laminating adhesive applicator wheel (ID No. ESLA1);**  
**Line No. 2 sealant applicator gun (ID No. ESSA3); and,**  
**Line No. 2 sealant applicator pan (ID No. ESSA4).**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<p><b>Affected Sources:</b> ESMA1, ESMA2, ESMA5, ESSEA1, ESSEA2, ESSA1, ESSA2, ESWIP1, ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESST1, ESSDT, ESCT1, ESCT2, ESCT3, ESCT4, ESHM3, ESVM3, ESLA1, ESSA3, ESSA4, ESHM1, ESHM2, ESSA5, and ESLA2</p> <p>Particulate emissions shall not exceed the rate prescribed by the process weight equations:</p> <p>For process rates up to 30 tons per hour:  <math>E = 4.10 \times P^{0.67}</math></p> <p>For process rates greater than 30 tons per hour:  <math>E = 55.0 \times P^{0.11} - 40</math></p> <p>Where: E = allowable emission rate (in lb/hr), and  P = process weight (in ton/hr).</p>	15A NCAC 2D .0515
Visible emissions	<p><b>Affected Sources:</b> ESMA1, ESMA2, ESMA5, ESSEA1, ESSEA2, ESSA1, ESSA2, ESWIP1, ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESST1, ESSDT, ESCT1, ESCT2, ESCT3, ESCT4, ESHM3, ESVM3, ESLA1, ESSA3, ESSA4, ESHM1, ESHM2, ESSA5, ESLA2, ESFST3 and ESFST4</p> <p>Visible emissions shall not exceed 20 percent opacity</p>	15A NCAC 2D .0521
PM	<p><b>Affected Sources:</b>  Coaters (ESLC1, ESLC2, and ESLC3)</p> <p>Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
Visible emissions	<p><b>Affected Sources:</b>  Coaters (ESLC1, ESLC2, and ESLC3)  Asphalt Storage Tanks (ESMA3, ESMS2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, and ESSEA4)</p> <p>Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
HAPs	See Section 2.2 i. 1 (Multiple Emission Sources-MACT, Existing Affected Asphalt Processing Facility and Asphalt Roofing Manufacturing Lines.	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)
SO <sub>2</sub>	See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO <sub>x</sub>	See Section 2.2 ii. 2. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	See Section 2.2 ii. 3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317

Regulated Pollutant	Limits/Standards	Applicable Regulation
TAPs	See Section 2.2 iii.. (Multiple Emission Sources-Toxic Pollutant Exemption rates) <b>STATE ENFORCEABLE ONLY</b>	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
TAPs	See Section 2.2 iv. 1 (Multiple Emission Sources-Toxic Pollutant Exemption rates) <b>STATE-ENFORCEABLE ONLY</b>	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) <b>STATE ENFORCEABLE ONLY</b>	15A NCAC 2D .1806

**1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from each affected source (**ID Nos. ESMA1, ESMA2, ESMA5, ESSEA1, ESSEA2, ESSA1, ESSA2, ESWIP1, ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESST1, ESSDT, ESCT1, ESCT2, ESCT3, ESCT4, ESHM3, ESVM3, ESLA1, ESSA3, ESSA4, ESHM1, ESHM2, ESSA5, ESLA2, ESFST3 and ESFST4**) shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour:

$$E = 4.10 \times P^{0.67}$$

For process rates greater than 30 tons per hour:

$$E = 55.0 \times P^{0.11} - 40$$

Where: E = allowable emission rate in pounds per hour, and  
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

- b. Each NSPS-affected tank vented to a control device shared with a coater (**ID Nos. ESMA3, ESMS2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, and ESSEA4**) shall comply with the particulate matter emission standard provided in Section 2.1 B.1 a., above, *when the coater is not operating*.

**Testing** [15A NCAC 02Q .0508(f)]

- c. If an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a. & b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

**Inspection/Maintenance** [15A NCAC 2Q .0508(f)]

- d. Particulate matter emissions from the emission sources shall be controlled as provided in the source description above. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer recommendations, the Permittee shall conduct a monthly visual inspection of the system ductwork and material collection devices for potential leaks. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the control devices are not inspected and maintained.
- e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
  - the results of each inspection;
  - the results of any maintenance performed on the control devices; and
  - any variance from manufacturers recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall monitor and record the temperature in the combustion chamber of the regenerative thermal oxidizer (**ID No. CDRTO**) in accordance with Section 2.2.A.1. of this permit. The Permittee shall be deemed

in noncompliance with 15A NCAC 2D .0515 if temperature falls below the requirement provided in Section 2.2.A.1.h. of this permit.

- g. The Permittee shall check the three energy supply indicator lights for each of the 24 electrical sections of the electrostatic precipitator (**ID No. CDESP**) weekly to ensure power supply. The Permittee shall maintain the following records on file:

- i. the date and time of indicator light check;
- ii. any indicator light that was out or blinking and the identification of the section; and
- iii. any corrective actions taken to correct the blinking or unlit indicator light.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

- h. The Permittee shall determine the maximum pressure drop across the mist eliminator (**ID No. CDME**) to ensure optimum control of particulate matter. This maximum pressure drop shall be monitored and recorded weekly. The Permittee shall maintain the following records on file:

- i. identification of the maximum value for pressure drop across the mist eliminator;
- ii. explanation of how the limit for this parameter was determined; and
- iii. explanation of the methods and instruments used to measure and monitor this parameter, as well as the relative accuracy and precision of these methods and instruments.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- i. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- j. The Permittee shall submit a summary report of periods of malfunction, periods when the 3-hour average temperature in the RTO combustion chamber is lower than the required minimum temperature (**ID No. CDRTO**), the ESP indicator lights are blinking or out (**ID No. CDESP**), and/or periods when the pressure drop across the mist eliminator (**ID No. CDME**) is recorded above its maximum allowable pressure drop. The summary report shall be postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from each of the affected sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, each week the Permittee shall observe the emission points of these sources for any visible emissions above normal (ID Nos. CDESP, CDME, CDRTO, CDFTR, ESFST3, and ESFST4). The observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for the sources (ESFST3, and ESFST4) in the first 30 days following the modification of the sources. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.2.a. above.
 If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be

in noncompliance along with any corrective actions taken to reduce visible emissions; and,  
 iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**3. 15A NCAC 2D .0524: NSPS UU - ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE**

- a. The Permittee shall limit emissions to the atmosphere from the coaters (**ID Nos. ESLC1, ESLC2, and ESLC3**) to no greater than the following:
- i. particulate matter in excess of 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle produced; and
  - ii. exhaust gases with an opacity of 20 percent.
- b. The Permittee shall limit emissions to the atmosphere from tanks sharing a control device with a coater (**ID Nos. ESMA3, ESMS2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, ESSEA4, ESFST3 and ESFST4**) to no greater than the following:
- i. particulate matter in excess of 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle produced *during periods when the coaters are in operation*; and,
  - ii. exhaust gases with an opacity of 20 percent *during periods when the coaters are in operation*; and,
  - iii. exhaust gases with an opacity of zero percent *during periods when the coaters are not in operation*, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blow for clearing. The control device shall not be by passed during this 15-minute period.
- [40 CFR 60.472(c)]

**Testing/Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. Pursuant to 40 CFR 63.8681, coaters and asphalt storage tanks that are subject to 40 CFR 60, Subpart UU *and* 40 CFR 63, Subpart LLLLL (Asphalt Roofing MACT) are only required to comply with the provisions of the MACT. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these requirements of Section 2.2.A.1. of this permit are not met.

**C. SAND, HEADLAP/GRANULE, TALC, AND LIMESTONE HANDLING SYSTEMS:**

**Pneumatic sand transfer system (ID No. ESPSTS) and storage silo (ID No. ESGS) with fabric filter (ID No. CDDC11)**

**Sand truck dump and conveyor system (ID No. ESSTS) with fabric filter (ID No. CDDC25)**

**Sand Silo No. 1 (ID No. ESSS1) with fabric filter (ID No. CDDC25)**

**Sand Silo No. 2 (ID No. ESSS2) with fabric filter (ID No. CDDC25)**

**Line No. 1 sand transfer system (ID No. ESBSB1) with fabric filter (ID No. CDDC22)**

**Line No. 2 sand transfer system (ID No. ESBSB2) with fabric filter (ID No. CDDC23)**

**Line No. 3 sand transfer system (ID No. ESBSB3) with fabric filter (ID No. CDDC17)**

**Headlap Unload and Transfer System (ID No. ESHLT) with two fabric filters (ID Nos. CDDC16 and CDDC24)**

**Two (2) Headlap Storage Silos (ID No. ESHLS) with fabric filter (ID No. CDDC24)**

**Reclaim talc collector (ID No. ESRTC2) with fabric filter (ID No. CDDC6)**

**Reclaim talc receiver No. 2 (ID No. ESPTR2) with fabric filter (ID No. CDDC4)**

**Talc silo (ID No. ESTSV) with fabric filter (ID No. CDDC8)**

**Railcar/truck dump pit vibrating conveyor bucket elevator belt conveyor hopper rock silos No. 1 and No. 2 (ID No. ESLSH)**

**Crushing mill/product cyclone No. 1 (ID No. ESCM1) with a 3.5 MMBtu/hr-rated fossil fuel fired heater (ID No. ESCMH1) with fabric filter (ID No. CDDC12)**

**Crushing mill/product cyclone No. 2 (ID No. ESCM2) with a 3.5 MMBtu/hr-rated fossil fuel fired heater (ID No. ESCMH2) with fabric filter (ID No. CDDC13)**

**Crushing mill/product cyclone No. 3 (ID No. ESCM3) with a 7.0 MMBtu/hr-rated fossil fuel-fired heater (ID**

No. ESCMH3) with fabric filter (ID No. CDDC19)  
 Crushed limestone silos No. 1 and No. 2 (ID Nos. ESLSV1 and ESLSV2) with fabric filter (ID No. CDDC18 - or- CDDC7)  
 Crushed limestone silo No. 3 (ID No. ESLSV3) with fabric filter (ID No. CDDC18 -or- CDDC7)  
 Line No. 1/Line No. 2 Limestone use bin (ID No. ESLUBV1) with fabric filter (ID No. CDDC2)  
 Line No. 3 Limestone use bin (ID No. ESLUBV2) with fabric filter (ID No. CDDC15)  
 Line No. 3 Limestone Hot Filler Bin (ID No. ESHFB) with fabric filter (ID No. CDDC15)  
 Fossil fuel fired limestone filler preheater/product cyclone No. 1 (ID No. ESLFH) with fabric filter (ID No. CDDC1)  
 Line No. 3 Filler Heater and Transfer System (ID No. ESLFH2) with fabric filter (ID No. CDDC15)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<p><b>Affected Sources:</b> ESPSTS, ESGS, ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLSV3, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2</p> <p>Particulate emissions shall not exceed the rate prescribed by the process weight equations:            For process rates up to 30 tons per hour:  <math>E = 4.10 \times P^{0.67}</math>            For process rates greater than 30 tons per hour:  <math>E = 55.0 \times P^{0.11} - 40</math>            Where: E = allowable emission rate (in lb/hr), and            P = process weight (in ton/hr).</p>	15A NCAC 2D .0515
SO <sub>2</sub>	<p><b>Affected Source:</b> ESLFH, ESCMH1, ESCMH2, ESCMH3</p> <p>Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials</p>	15A NCAC 2D .0516
visible emissions	<p><b>Affected Sources:</b> ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2</p> <p>Visible emissions shall not exceed 20 percent opacity</p>	15A NCAC 2D .0521
visible emissions	<p><b>Affected Sources:</b> ESPSTS, ESGS, ESSTS, ESSS1, ESSS2, ESHLT, ESHLS, ESLSV3</p> <p>Visible emissions shall not exceed one percent opacity</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
PM	<p><b>Affected Sources:</b> ESCM1, ESCM2, ESCM3</p> <p>0.022 grains/dscf -stack emission</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart OOO)
visible emissions	<p><b>Affected Sources:</b> ESLSH, ESCM1, ESCM2, ESCM3</p> <p>7 percent opacity - stack emission            10 percent opacity fugitive emission</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart OOO)
SO <sub>2</sub>	<p><b>Affected Source:</b> ESLFH</p> <p>See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)</p>	15A NCAC 2Q .0317
NO <sub>x</sub>	<p><b>Affected Source:</b> ESLFH</p> <p>See Section 2.2 ii. 2            (Multiple Emission Sources-PSD Major Facility Avoidance Condition)</p>	15A NCAC 2Q .0317
VOC	<p><b>Affected Source:</b> ESLFH</p> <p>See Section 2.2 ii. 3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)</p>	15A NCAC 2Q .0317

**1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from each affected source (ID No. ESPSTS, ESGS, ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLSV3, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2) shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour:  $E = 4.10 \times P^{0.67}$

For process rates greater than 30 tons per hour:  $E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emission rate in pounds per hour, and  
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions test is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. Particulate matter emissions from the affected sources shall be controlled by fabric filtration as delineated in the equipment list. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. once per week, observe the magnehelic pressure gauge and record the pressure drop across the baghouses to ensure integrity of the bagfilters; and,
  - ii. conduct a monthly visual inspection of the system ductwork and material collection unit for leaks. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.
- c. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the control devices; and
  - iv. any variance from manufacturers recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from the affected sources (**ID No. ESLFH, ESCMH1, ESCMH2, and ESCMH3**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from natural gas **and No. 2 fuel oil** combustion.

**3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from each of the affected sources (**ID Nos. ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLUBV1, ESLUBV2, ESHFB, ESLFH, and ESLFH2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging

periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, each week the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.3.a. above. If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
  - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**4. 15A NCAC 2D .0524: NSPS UU - ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE**

- a. The Permittee shall not allow to be discharged into the atmosphere exhaust gases with an opacity greater than one percent from the affected sources (**ID Nos. ESPSTS, ESGS, ESSTS, ESSS1, ESSS2, ESHLT, ESHLS, and ESLSV3**). [40 CFR 60.472(c) and (d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with 40 CFR 60.474 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.4.a. or b., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, once per month the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 C.4. a. above. If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;



- ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**5. 15A NCAC 2D .0524: NSPS OOO - NONMETALLIC MINERALS PROCESSING PLANTS**

- a. The Permittee shall not allow to be discharged into the atmosphere from the stack of any affected source (**ID Nos. ESCM1, ESCM2, and ESCM3**) which:
  - i. contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); or,
  - ii. exhibit greater than 7 percent opacity.
- b. The Permittee shall not allow fugitive emissions to be discharged into the atmosphere from any affected source (**ID Nos. ESLSH, ESCM1, ESCM2, and ESCM3**) that exhibit greater than 10 percent opacity.
- c. Emissions resulting from truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the emissions limitations provided in Section 2.1 C.5. a. and b., above, as provided in 40 CFR 60.672(d). [40 CFR 60.672(a), (b), and (d)]

**Monitoring** [15A NCAC 2Q .0508(f)]

- d. Particulate matter emissions from the affected sources shall be controlled by fabric filtration as delineated in the equipment list. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
  - i. once per week, observe the magnehelic pressure gauge and record the pressure drop across the baghouses to ensure integrity of the bagfilters; and,
  - ii. conduct a monthly visual inspection of the system ductwork and material collection unit for leaks. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the ductwork and bagfilters are not inspected and maintained.
- e. To assure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 C.5.a. or b. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- f. The results of the visible emissions monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.
- g. The results of inspection and maintenance on fabric filters shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;

- iii. the results of any maintenance performed on the control devices; and
  - iv. any variance from manufacturers recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- h. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- i. The Permittee shall submit a summary report of the visible emissions observations and monitoring activities for fabric filters and collection systems postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

- D. Line No. 3 dry mat looper (ID No. ESDML3) with fabric filter (ID No. CDDC14)**  
**Line No. 1 surfacing/backsurfacing process (ID No. ESBSP1) with fabric filter (ID No. CDDC9)**  
**Line No. 2 surfacing/backsurfacing process (ID No. ESBSP2) with fabric filter (ID No. CDDC10)**  
**Line No. 3 surfacing/backsurfacing process (ID No. ESBSP3) with fabric filter (ID No. CDDC14)**  
**Line No. 1 cooling section (ID No. ESCS1)**  
**Line No. 2 cooling section (ID No. ESCS2)**  
**Line No. 3 cooling section (ID No. ESCS3)**  
**Line Nos. 1 & 2 inkjet package labeling (ID No. ESINK)**  
**Line No. 3 inkjet package labeling (ID No. ESINK2)**  
**Line No. 3 nail line paint applicator (ID No. ESNLPA)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Particulate emissions shall not exceed the rate prescribed by the process weight equations: For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ For process rates greater than 30 tons per hour: $E = 55.0 \times P^{0.11} - 40$ Where: E = allowable emission rate (in lb/hr), and P = process weight (in ton/hr).	15A NCAC 2D .0515
Visible emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
SO <sub>2</sub>	<b>Affected Sources:</b> ESCS1, ESCS2, ESCS3 See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	<b>Affected Sources:</b> ESCS1, ESCS2, ESCS3 See Section 2.2 ii. 3 (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO <sub>x</sub>	<b>Affected Sources:</b> ESCS1, ESCS2, ESCS3, ESINK, ESINK2, ESNLPA See Section 2.2 ii. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	<b>Affected Sources:</b> ESCS1, ESCS2, ESCS3, ESINK, ESINK2, ESNLPA See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) <b>STATE ENFORCEABLE ONLY</b>	15A NCAC 2D .1806

**1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from each source shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour:  $E = 4.10 \times P^{0.67}$

For process rates greater than 30 tons per hour:  $E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emission rate in pounds per hour, and  
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. Particulate matter emissions from the emission sources shall be controlled by fabric filtration as delineated in the equipment list. In order to assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer on the fabric filters. The inspections shall include a monthly external visual inspection of each unit's structural integrity and collection system, at a minimum. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the control device is not inspected and maintained.
- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the control devices; and
  - iv. any variance from manufacturers recommendations, if any, and corrections made.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from each of the mat looper (ID No. ESDML3) surfacing/backsurfacing processes (ID Nos. ESBSP1, ESBSP2, and ESBSP3), cooling sections (ID Nos. ESCS1, ESCS2, and ESCS3), shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, each week the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
  - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**E. Line No. 8 – Polypropylene Roofing Product Manufacturing**

**Raw Material Handling (ID No. L8RMH) with associated bagfilter (ID No. L8RMHDC);**

**Extrusion Process (ID No. L8); and,**

**Polypropylene grinder (ID No. L8PG) with associated bagfilter (ID No. CDDC26)**

The following table provides a summary of limits and standards for the emission source(s) described above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
PM	<p><b><u>Affected Sources:</u> L8RMH and L8PG</b>            Particulate emissions shall not exceed the rate prescribed by the process weight equation:</p> $E = 4.10 \times P^{0.67}$ <p>Where: E = allowable emission rate (in lb/hr), and            P = process weight (in ton/hr).</p>	15A NCAC 2D .0515
Visible emissions	<p><b><u>Affected Sources:</u> L8RMH and L8PG</b>            Visible emissions shall not exceed 20 percent opacity</p>	15A NCAC 2D .0521
TAPs	<p><b><u>Affected Source:</u> L8</b>            See Section 2.2 iii. (Multiple Emission Sources-Control of Toxic Air Pollutants) <b>STATE-ENFORCEABLE ONLY</b></p>	15A NCAC 2D .1100
TAPs	<p><b><u>Affected Source:</u> L8</b>            See Section 2.2 iv. 1. (Multiple Emission Sources-Toxic Pollutant Exemption rates) <b>STATE-ENFORCEABLE ONLY</b></p>	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	<p><b><u>Affected Source:</u> L8</b>            See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)</p>	15A NCAC 2D .0958
Odor	<p>See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) <b>STATE-ENFORCEABLE ONLY</b></p>	15A NCAC 2D .1806

**1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from the raw material handling operation (**ID No. L8RMH**) and polypropylene grinder (**ID No. L8PG**), including the conveyors, electrical/desiccant dryer and weigh blender, shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where: E = allowable emission rate in pounds per hour, and  
 P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. Particulate matter emissions from the dryer and weigh blender shall be controlled by a baghouse (**ID No. L8RMHDC**). Particulate matter emissions from the polypropylene grinder shall be controlled by baghouse (**ID No. CDDC26**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
  - i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
  - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilter is not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the control devices; and
  - iv. any variance from manufacturers recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the baghouse within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the raw material handling operation (**ID No. L8RMH**) and polypropylene grinder (**ID No. L8PG**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, each month the Permittee shall observe the emission point of the raw material handling baghouse (**ID No. L8RMHDC**) and polypropylene grinder baghouse (**ID No. CDDC26**). The observation must be made for each month of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for the polypropylene grinder (**ID No. L8PG**) in the first 30 days following the effective date of the permit. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
  - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and,
  - the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

F. Natural gas, ~~No. 2 and No. 6 fuel oil~~-fired flux preheater No. 1 (11.3 million Btu per hour heat input, ID No. ESPH1)  
 Natural gas, ~~No. 2 and No. 6 fuel oil~~-fired flux preheater No. 2 (11.3 million Btu per hour heat input, ID No. ESPH2)  
 Natural gas, ~~No. 2 and No. 6 fuel oil~~-fired saturant heater No. 1 (11.3 million Btu per hour heat input, ID No. ESSH1)

Natural gas, No. 2 ~~and No. 6 fuel oil~~-fired boiler No. 1 (16.7 million Btu per hour heat input, ID No. ESB1)  
 Natural gas, No. 2 ~~and No. 6 fuel oil~~-fired boiler No. 2 (16.7 million Btu per hour heat input, ID No. ESB2)  
 Natural gas, ~~No. 2 fuel oil~~-fired shingle coating heater No. 1 (4.7 million Btu per hour heat input, ID No. ESSCH1)  
 Natural gas, ~~No. 2 fuel oil~~-fired shingle coating heater No. 2 (4.7 million Btu per hour heat input, ID No. ESSCH2)

Natural gas, ~~No. 2 and No. 6 fuel oil~~-fired shingle coating heater No. 3 (3.75 ~~11.3~~ million Btu per hour heat input, ID No. ESSCH3)

Natural gas, ~~No. 2 fuel oil~~-fired hot oil heater No. 2 (5.0 million Btu per hour heat input, ID No. ESHOH2)  
 Natural gas, ~~No. 2 fuel oil~~-fired hot oil heater No. 4 (15.0 million Btu per hour heat input, ID No. ESHOH4) [NSPS Dc]

Natural gas, ~~No. 2 fuel oil~~-fired hot oil heater No. 1 (2.1 million Btu per hour heat input, ID No. ESHOH1)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Particulate emissions shall not exceed 0.3236 pounds per million Btu heat input.	15A NCAC 2D .0503
SO <sub>2</sub>	Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 2D .0516
visible emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
SO <sub>2</sub>	See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO <sub>x</sub>	See Section 2.2 ii. 2 (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	See Section 2.2 ii. 3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
SO <sub>2</sub>	Maximum sulfur content of fuel oil not to exceed 0.5 percent by weight (Only for heater ESHOH4)	15A NCAC 02D .0524 NSPS Dc

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	Best Combustion Practices	15A NCAC 2D .1109 [CAA § 112(j)]
filterable PM mercury carbon monoxide	<i>For No. 6 Fuel Oil Firing</i> 0.45 lb/mmBtu 2.0e-05 lb/mmBtu 28 ppmvd & 7% O <sub>2</sub>	15A NCAC 2D .1109 [CAA § 112(j)]
hazardous air pollutants	<i>For No. 2 Fuel Oil &amp; Natural Gas Firing</i> Best Combustion Practices	

**1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. i) Emissions of particulate matter from the combustion of natural gas and ~~2 and No. 6 fuel oil~~, that are discharged from all sources except (ID No. ESHOH1) into the atmosphere shall not exceed 0.3236 pounds per million Btu heat input.
- ii) Emissions of particulate matter from the combustion of natural gas ~~and No. 2 6 fuel oil~~, that are discharged from (ID No. ESHOH1) into the atmosphere shall not exceed 0.29 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas, and No. 2 ~~and No. 6~~ fuel oil.

**2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 F.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from natural gas and No. 2 fuel oil for these sources.
- d. The maximum sulfur content of any No. 6 fuel oil received and burned in the boiler shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil exceeds this limit.
- e. To assure compliance, the Permittee shall monitor the sulfur content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The fuel oil supplier certifications shall be retained on file, provided upon request by DAQ, and include the following information:
- the name of the fuel oil supplier;
  - the maximum sulfur content of the fuel oil received;
  - the method used to determine the maximum sulfur content of the fuel oil; and
  - a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the oil is not monitored and recorded.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall submit a summary report of the fuel oil supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from each of the listed indirect fired combustion sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance during No. 6 fuel oil use, the Permittee shall observe the emission points of this source for any visible emissions above normal once per day. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three days of absent observations per semi-annual period. If visible emissions from this source are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 F.3.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

- d. No monitoring is required for combustion of natural gas or No. 2 fuel oil.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

- f. No recordkeeping is required for visible emissions from the firing of natural gas or No. 2 fuel oil.

**Reporting** [15A NCAC 2Q .0508(f)]

- g. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**4. Reserved.****~~15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Dc~~**

- ~~a. The Oil heater (ESHOH4) shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions." [15A NCAC 02D .0524]~~

**~~Emission Limitations~~** [15A NCAC 02D .0524]

- ~~b. The maximum sulfur content of any fuel oil burned in the boiler shall not exceed 0.5 percent by weight,~~



determined by supplier certifications or a 30-day rolling average of sampling data.

**Monitoring** [15A NCAC 02Q .0508(f)]

e. None

Sulfur dioxide emissions shall be monitored in i., ii., or iii as follows:

- i. Distillate Oil – Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR § 60.44e(h).
- ii. Oil samples shall be collected daily in an as-fired condition at the inlet to the steam-generating unit and analyzed for sulfur content and heat content according to the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO<sub>2</sub> input rate.
- iii. As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam-generating unit immediately after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the Permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if sulfur dioxide emissions are not monitored as described above.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. In addition to any other recordkeeping required by 40 CFR § 60.48e or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired during each month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall comply with the reporting required by 40 CFR § 60.48e or notification requirements to the EPA. , the Permittee is required to NOTIFY the DAQ in writing of the following:
  - i. a summary report , acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate fuel oil fired, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June as follows:
    - (A) Distillate Oil – Fuel supplier certification shall include the following information:
      - (1) the name of the oil supplier;
      - (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR § 60.41e; and
      - (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the semi-annual period.

**5. 15A NCAC 2D .1109: Case-by-Case MACT**

- a. The initial compliance date for the emission limitations and associated monitoring, recordkeeping, and reporting requirements listed below is March 2, 2014. These conditions need not be included on the annual compliance certification until after the initial compliance date. These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 2D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.
- b. Reserved.

Emissions from these sources shall not exceed the emissions limitations listed below as a result of firing No. 6 fuel oil:

- i. Filterable PM: 0.45 lbs/mmBtu
- ii. Mercury (Hg): 2.0e-05 lbs/mmBtu
- iii. Carbon Monoxide (CO): 28 ppmvd, corrected to 7% oxygen

- c. Reserved.

**Compliance Testing** [15A NCAC 2Q .0508(f)]

To demonstrate compliance with the standards provided in Section 2.1 F.5.b., above, the Permittee shall conduct compliance tests for each listed pollutant. The Permittee may choose either of the following methods for the compliance tests:

- i. ~~Initial & Periodic Stack Testing.~~ Stack testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ in Section 3 of this permit. Tests may not be conducted during periods of startup, shutdown, or malfunction. Following the initial compliance test, the Permittee shall test the source annually. Each stack test shall be conducted between 11 and 13 months after the previous stack test. However, if a stack test shows that the emission rate of any pollutant is less than or equal to 80 percent of the allowable limit, the stack test frequency shall be reduced to once every five years for that pollutant.
- ii. ~~Periodic Fuel Analysis.~~ The Permittee may use a fuel analysis to demonstrate compliance with the mercury standard. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation in Section 2.1 F.5.b., above, the Permittee shall conduct a follow-up stack test of the affected source within 90 days. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109.

~~The initial compliance test shall be conducted within 180 days of the initial compliance date. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the required compliance tests are not conducted, or if the results of a compliance test exceed a limit in Section 2.1 F.5.b., above.~~

**Work Practice Standards** [15A NCAC 2Q .0508(f)]

- d. The Permittee shall perform an annual boiler or heater inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
  - i. Inspect the burner or heater, and clean or replace any components of the burner as necessary;
  - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
  - iii. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers are not inspected and maintained as required above.

- e. The results of any required annual burner inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. The date of each recorded action;
  - ii. The results of each inspection; and,
  - iii. The results of any maintenance performed on the boilers.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. **Reserved.**

~~Notification of Compliance Status.~~ The Permittee must submit a Notification of Compliance Status that meets the requirements of 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the final required performance test and/or other initial compliance demonstration. The Notification of Compliance Status report must contain the following information, as applicable:

- i. ~~A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source, description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.~~
- ii. ~~Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance.~~
- iii. ~~A certification signed by the Responsible Official that the facility has met all applicable emission limits and work practice standards.~~

- g. **Semiannual Summary Report.** The Permittee shall submit a summary report by January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The first summary report shall be required on January

30, 2014. The report shall include the following:

- i. Company name and address;
- ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
- iii. Date of report and beginning and ending dates of the reporting period;
- iv. A summary of the results of the annual performance tests;
- v. Signed statement indicating that no new types of fuel were fired in the affected sources.

**Last Effective Date of 15A NCAC 02D .1109: Case-by-Case MACT**

- h. The Permittee shall comply with this CAA §112(j) standard **until May 19, 2019**. The initial compliance date for the applicable CAA §112(d) standard for "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" is **May 20, 2019**, as specified in Section 2.1.A. 6. 7. And 8., below.

**6. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

**For sources which are existing gas 1 units with a heat input capacity of less than or equal to 5 million Btu per hour and currently subject to 15A NCAC 2D .1109: Case-by-Case MACT.**

Natural gas, ~~No. 2 fuel oil~~-fired shingle coating heater No. 1 (4.7 million Btu per hour heat input, ID No. ESSCH1)  
 Natural gas, ~~No. 2 fuel oil~~-fired shingle coating heater No. 2 (4.7 million Btu per hour heat input, ID No. ESSCH2)  
 Natural gas, ~~No. 2 fuel oil~~-fired hot oil heater No. 2 (5.0 million Btu per hour heat input, ID No. ESHOH2)  
 Natural gas, ~~No. 2 fuel oil~~-fired hot oil heater No. 1 (2.1 million Btu per hour heat input, ID No. ESHOH1)  
 Natural gas ~~No. 2 and No. 6 fuel oil~~-fired shingle coating heater No. 3 (3.75 ~~11.3~~ million Btu per hour heat input, ID No. ESSCH3)

**Applicability** [40 CFR 63.7485, .7490(d), .7499(l)]

- a. For the existing sources natural gas fired shingle coating heaters (ID Nos. ESSCH1, ESSCH2 and ESSCH3) and natural gas fired hot oil heaters (ID Nos. ESHOH2 and ESHOH1) designed to burn gas 1 fuels **with a heat input capacity of less than or equal to 5 million Btu per hour**, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

- i. The Permittee shall comply with the CAA §112(j) standard in in Section 2.1.A. 6. h., above, through **May 19, 2019**. The Permittee shall be subject to the requirements of this standard starting **May 20, 2019**. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.

**Definitions and Nomenclature** [40 CFR 63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

**40 CFR Part 63 Subpart A General Provisions** [40 CFR 63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

**Compliance Date** [40 CFR 63.7510(e), 63.56(b)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

**Notifications** [40 CFR 63.7545(e)(8), 63.7530(d),(e),(f)]

- e. The Permittee shall submit a Notification of Compliance Status. The notification shall contain the following:
  - i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
  - ii. the following certification(s) of compliance, as applicable:
    - A. "This facility complies with the required initial tune-up according to the procedures in.40 CFR 63.7540(a)(10)(i) through (vi)' [i.e condition g.i. through g.v. and m. i.]; and
    - B. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [ i.e., condition 2.1

F. 6. k.] and is an accurate depiction of the facility at the time of the assessment.

The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later).

**General Compliance Requirements** [40 CFR 63.7505(a), 63.7500(f)]

- f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

**Work Practice Standards** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall conduct a tune-up of the process heater every five years as specified below.
- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months
  - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
  - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown)'
  - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject.
  - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40CFR 63.7500(a), (e), 63.7540(a)(10), (a)(12)]

- h. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up. [40CFR 63.7515(d)]
- i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[40 CFR 63.7540(a)(13), 63.7515(g)]

- j. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in 2.1 F. 6. f., through j., are not met.

**Energy Assessment Requirements** [15A NCAC 02Q .0508(f)]

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: [§63.7500(a)(1), Table 3]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in condition k. are not met.

**Recordkeeping Requirements** [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- l. The Permittee shall keep the following:
- i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).  
[40 CFR 63.7555(a)(1)]
  - ii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:  
(A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in

volume percent, measured before and after the adjustments of the source;

(B) A description of any corrective actions taken as a part of the combustion adjustment; and

(C) The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

iii. The associated records for conditions f. through l. including:

(A) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.

[40 CFR 63.10(b)(2)(ii)]

iv. maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

[40 CFR 63.7555(i)]

v. maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

[40 CFR 63.7555(j)]

m. The Permittee shall:

i. maintain records in a form suitable and readily available for expeditious review;

ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and

iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in conditions 2.1 F. 6. l., through m.

**Reporting Requirements** [15A NCAC 02Q .0508(f)]

n. The Permittee shall submit compliance reports to the DAQ on a 5-year basis. The first report shall cover the period beginning on the compliance date specified in condition d. and ending on the earliest December 31st following a complete 5-year period. Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 31.

40 CFR 63.7550(a), (b)

i. This report must also be submitted electronically through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the Permittee submit the report to the at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.7550(h)(3)]

o. The compliance report must contain the following information:

i. Company name and address;

ii. Process unit information, emissions limitations, and operating parameter limitations;

iii. Date of report and beginning and ending dates of the reporting period;

iv. The total operating time during the reporting period;

iv. If there are no deviations from the requirements of the work practice requirements in condition g. above, a statement that there were no deviations from the work practice standards during the reporting period; and

v. Include the date of the most recent tune-up for each unit required according to condition g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.

[40 CFR 63.7550(a) and (c), Table 9]

p. If you have a deviation from a work practice standard during the reporting period, the report must contain the following information:

i. A description of the deviation and which emission limit or operating limit from which you deviated; and

ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

[40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in 2.1 F. 6. n., through p., are not met.

## 7. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

**For the existing sources designed to burn gas 1 fuels with a heat input capacity equal to or greater than 10 million Btu per hour and currently subject to 15A NCAC 2D .1109: Case-by-Case MACT.**

Natural gas, ~~No. 2 and No. 6 fuel oil~~ fired flux preheater No. 1 (11.3 million Btu per hour heat input, ID No. ESPH1)

Natural gas, ~~No. 2 and No. 6 fuel oil~~ fired flux preheater No. 2 (11.3 million Btu per hour heat input, ID No. ESPH2)

Natural ~~gas, No. 2 and No. 6 fuel oil~~ fired saturant heater No. 1 (11.3 million Btu per hour heat input, ID No. ESSH1)

~~Natural gas, No. 2 and No. 6 fuel oil fired shingle coating heater No. 3 (3.75 11.3 million Btu per hour heat input, ID No. ESSCH3)~~

Natural gas, ~~No. 2 fuel oil~~ fired hot oil heater No. 4 (15.0 million Btu per hour heat input, ID No. ESHOH4) [NSPS Dc]

### Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

- a. For the existing sources natural gas fired flux preheater (ID Nos. ESPH1 and ESPH2), natural fired saturant heater (ID No. ESSH1), ~~natural gas fired shingle coating heater (ID No. ESSCH3)~~ and natural gas fired hot oil heater (ID No. ESHOH4) designed to burn gas 1 fuels **with a heat input capacity equal to or greater than 10 million Btu per hour**, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD . "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

- i. The Permittee shall comply with the CAA §112(j) standard in Section 2.1.A. 5. h., above, through **May 19, 2019**. The Permittee shall be subject to the requirements of this standard starting **May 20, 2019**. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.

### Definitions and Nomenclature [§63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

### 40 CFR Part 63 Subpart A General Provisions [§63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

### Compliance Date [40 CFR 63. 7510(e), §63.56(b)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than **May 20, 2019**.

### Notifications [§63.7545(e)(8), §§63.7530(d),(e),(f)]

- e. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later). The notification shall contain the following:
  - i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
  - ii. the following certification(s) of compliance, as applicable:
    - A.- "This facility complies with the required initial tune-up according to the procedures in.40 CFR 63.7540(a)(10)(i) through (vi)' [i.e., conditions g.i. through g.v. and l. ii.]; and
    - B.- "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [ i.e., condition 2.1 F. 7. k.] and is an accurate depiction of the facility at the time of the assessment.

**General Compliance Requirements** [§63.7505(a), §63.7500(f)]

- f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

**Work Practice Standards** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall conduct a tune-up of the **sources annually** as specified below.
- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown;
  - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
  - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
  - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject; and
  - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- [§§63.7500(a), (e), §63.7540(a)(10)]
- h. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [40CFR 63.7515(d)]
- i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.  
[§63.7540(a)(13), §63.7515(g)]
- j. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.  
[§63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in conditions 2.1 F. 7. c., through j., are not met.

**Energy Assessment Requirements** [15A NCAC 02Q .0508(f)]

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in 40 CFR § 63.7575:  
[40 CFR §63.7500(a)(1), Table 3]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in condition k. are not met.

**Recordkeeping Requirements** [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- l. The Permittee shall keep the following:
- i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).  
[40 CFR 63.7555(a)(1)]
  - ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
    - (A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;



(B) a description of any corrective actions taken as a part of the combustion adjustment; and

(C) the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

iii. the associated records for conditions 2.1 F. 7. f., through k., including:

(A) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.

[40 CFR 63.10(b)(2)(ii)]

iv. records of the calendar date, time, occurrence and duration of each startup and shutdown.

[40 CFR 63.7555(i)]

v. records of the type(s) and amount(s) of fuels used during each startup and shutdown.

[40 CFR 63.7555(j)]

m. The Permittee shall:

i. maintain records in a form suitable and readily available for expeditious review;

ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and

iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in conditions 2.1 F. 7. l., through m.

**Reporting Requirements** [15A NCAC 02Q .0508(f)]

n. Pursuant to 40 CFR 63.7550(b), the Permittee shall submit compliance reports to the DAQ on an annual basis. The Permittee shall submit the compliance report postmarked on or before January 30 of each calendar year for the preceding 12-month period. The first report shall be postmarked on or before January 30, 2017.

i. This report must also be submitted electronically through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the Permittee submit the report to the at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.7550(h)(3)]

o. The compliance report must contain the following information:

i. Company name and address;

ii. Process unit information, emissions limitations, and operating parameter limitations;

iii. Date of report and beginning and ending dates of the reporting period;

iv. The total operating time during the reporting period;

iv. If there are no deviations from the requirements of the work practice requirements in condition g. above, a statement that there were no deviations from the work practice standards during the reporting period; and

v. Include the date of the most recent tune-up for each unit required according to condition g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.

[40 CFR 63.7550(a) and (c), Table 9]

p. If you have a deviation from a work practice standard during the reporting period, the report must contain the following information:

i. A description of the deviation and which emission limit or operating limit from which you deviated; and

ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

[40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in conditions



2.1 F. 7. n., through p., are not met.

## **8. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

**For the existing sources designed to burn gas 1 fuels with a heat input capacity equal to or greater than 10 million Btu per hour burning No. 2 fuel oil only during period of gas curtailment and currently subject to 15A NCAC 2D .1109: Case-by-Case MACT.**

**Natural gas and No. 2 oil- fired boiler No. 1 (16.7 million Btu per hour heat input, ID No. ESB1)**

**Natural gas and No. 2 oil-fired boiler No. 2 (16.7 million Btu per hour heat input, ID No. ESB2)**

### **Applicability** [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

- a. For the existing sources natural gas and No. 2 oil-fired boilers (ID Nos. ESB1 and ESB2) categorized as existing “units designed to burn gas 1 fuels” and burning No. 2 fuel oil only during period of gas curtailment, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD . “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters” and Subpart A “General Provisions.”
  - i. **The Permittee shall comply with the CAA §112(j) standard in Section 2.1.A. 5. h., above, through May 19, 2019. The Permittee shall be subject to the requirements of this standard starting May 20, 2019. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.**

### **Definitions and Nomenclature**

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.
  - i. The sources, as requested by the Permittee, shall meet the definition of a “unit designed to burn only natural gas with the following exceptions:
    - A. The Permittee may burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration.
    - B. The Permittee may only burn liquid fuel during periodic testing, maintenance, or operator training, **not to exceed a combined total of 48 hours during any calendar year.**

[40 CFR § 63.7575(Period of gas curtailment)]

### **40 CFR Part 63 Subpart A General Provisions**

- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 of MACT Subpart DDDDD.  
[40 CFR § 63.7565]

### **Compliance Date**

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than **May 20, 2019.**  
[40 CFR § 63.7510(e) and 40 CFR § 63.56(b)]

### **Notifications**

- e. The Permittee shall submit a Notification of Compliance Status. The notification shall contain the following:
  - i. A description of the affected units including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuels burned.
  - ii. the following certification(s) of compliance, as applicable:
    - A. The Permittee complies with the required initial tune-up according to the procedures in 40 CFR § 63.7540(a)(10)(i) through (vi)’ [See Section 2.1 F. 8. g., conditions, below] and
    - B. The Permittee has had an energy assessment performed according to 40 CFR § 63.7530(e) [See Section 2.1 F. 8. k., conditions, below] and is an accurate depiction of the facility at the time of the assessment.

The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later).  
[40 CFR § 63.7545(e)(8), 40 CFR § 63.7530(d),(e), and (f)]

### **General Compliance Requirements**

- f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.  
[40 CFR § 63.7505(a) and 40 CFR § 63.7500(f)]

**Work Practice Standards** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall conduct a tune-up of the boilers annually as specified below:
- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown);
  - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
  - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
  - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject; and
  - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR § 63.7500(a), Table 3 of MACT DDDDD and 40 CFR § 63.7540(a)(10)]

- h. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [40 CFR § 63.7515(d)]
- i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[40 CFR § 63.7540(a)(13) and 40 CFR § 63.7515(g)]

- j. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR § 63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 F. 8. f., through j., are not met.

**Energy Assessment Requirements** [15A NCAC 02Q .0508(f)]

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must include the following items, with the extent of the evaluation for items (i) to (v) appropriate for the on-site technical hours listed in 40 CFR § 63.7575:
- i. A visual inspection of the boiler or process heater system;
  - ii. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.;
  - iii. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator;
  - iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
  - v. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified;
  - vi. A list of cost-effective energy conservation measures that are within the facility's control;
  - vii. A list of the energy savings potential of the energy conservation measures identified; and
  - ix. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[§63.7500(a)(1), Table 3 of MACT DDDDD]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 F. 8. k., are not met.

**Recordkeeping Requirements** [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- l. The Permittee shall keep the following:

- i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).  
[40 CFR § 63.7555(a)(1)]
- ii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
  - (A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler or process heater;
  - (B) A description of any corrective actions taken as a part of the tune-up; and
  - (C) The type and amount of fuel used over the 12 months prior to the annual tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.  
[40 CFR § 63.7540(a)(10)(vi)]
- iii. The associated records for conditions f. through k. including:
  - (A) The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.  
[40 CFR § 63.10(b)(2)(ii)]
- iv. Maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.  
[40 CFR § 63.7555(i)]
- v. Maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.  
[40 CFR § 63.7555(j)]
- vi. maintain the following records:
  - A. types of fuels combusted during periods of gas curtailment, gas supply interruption, periodic testing maintenance and operator training;
  - B. date and duration of periods of gas curtailment and gas supply interruption; and
  - C. date and duration of periods of testing, maintenance and operator training while combusting liquid fuel.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the Permittee burns liquid fuel outside of periods of gas curtailment and gas supply interruption, except for the combined total of 48 hours during any calendar year allowed for periodic testing, maintenance, or operator training.
- m. The Permittee shall:
  - i. maintain records in a form suitable and readily available for expeditious review;
  - ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
  - iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.  
[40 CFR § § 63.7560, and 40 CFR § 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in Section 2.1 F. 8. l., through m.

**Reporting Requirements** [15A NCAC 02Q .0508(f)]

- n. The Permittee shall submit compliance reports to the DAQ on an annual basis. The first report shall cover the period beginning on the compliance date specified in condition d. and ending on the earliest December 31st following a complete annual period. Subsequent reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 31.  
[40 CFR § 63.7550(a) and (b)]
  - i. This report must also be submitted electronically through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the Permittee submit the report to the at the appropriate address listed in 40 CFR 63.13. [40 CFR § 63.7550(h)(3)]

- o. The compliance report must contain the following information:
  - i. Company name and address;
  - ii. Process unit information, emissions limitations, and operating parameter limitations;
  - iii. Date of report and beginning and ending dates of the reporting period;
  - iv. The total operating time during the reporting period;
  - iv. If there are no deviations from the requirements of the work practice requirements in condition g. above, a statement that there were no deviations from the work practice standards during the reporting period; and
  - v. Include the date of the most recent tune-up for each unit required according to condition g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.

[40 CFR 63.7550(a) and (c), Table 9]

- p. The report must contain a summary of the records required for Section 2.1 F. 8. 1., vi., above.
- q. If you have a deviation from a work practice standard during the reporting period, the report must contain the following information:
  - i. A description of the deviation and which work practice standard from which you deviated; and
  - ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

[40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.1 F. 8. n., through q., are not met.

**G. Reserved.****2,500 kw diesel-fired emergency generator (ID No. ESEDG)**

The following table provides a summary of limits and standards for the emission source(s) described above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
<b>SO<sub>2</sub></b>	Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 2D .0516
<b>Visible emissions</b>	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
<b>HAPs</b>	MACT for Reciprocating Internal Combustion Engines; Notification requirement per 40 CFR 63.2280	15A NCAC 2D .1111 (40 CFR 63 Subpart ZZZZ)
<b>SO<sub>2</sub></b>	See Section 2.2 ii. 1. (Multiple Emission Sources - PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317

**1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 G.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from No. 2 fuel oil for this source.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the listed emergency generator shall not be more than 20 percent opacity when averaged over a six minute period. However, six minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24 hour period. In no event shall the six minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for combustion of No. 2 fuel oil.

**3. 15A NCAC 2D .1111: Maximum Achievable Control Technology (MACT) 40 CFR Part 63 Subpart ZZZZ (Reciprocating Internal Combustion Engines)**

- a. The diesel fired emergency generator (ID No. ESEDG) shall comply with this MACT the Permittee shall follow the following requirements:
- i) There is no time limit on the use of emergency generator (ID No. ESEDG) in emergency situations;
  - ii) The Permittee may operate the emergency generator (ID No. ESEDG) for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units

is limited to 100 hours per year. The Permittee may petition DAQ for approval of additional hours to be used for maintenance checks and readiness testing.

- iii) The Permittee may operate the emergency generator (ID No. ESEDG) up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving.

#### **4. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS [40 CFR 60 Subpart III]**

- a. NSPS Equipment Specification The Permittee shall purchase or rent emergency generator (ID No. ESEDG) for the **model year 2007 or later** which meet the applicable requirements under NSPS Subpart III and a **displacement of less than 30 liters per cylinder**. The Permittee shall maintain a record of engine manufacturer data indicating compliance with the standards

- b. For 2007 model year and later emergency generator (ID No. ESEDG) with a maximum engine power greater than or equal to 37 KW (50 HP) and less than or equal to 2,237 KW (3,000 HP), with a displacement of less than 10 liters per cylinder engines must comply with the emission standards as specified below: [60.4202(a)(2)]

##### **Emission Standards [40 CFR 89.112]**

- i) The Permittee shall comply with the emission standards for the diesel fired emergency generator (ID No. ESEDG) as follows:

NMHC+NOX: 6.4 g/kw hr

PM: 0.2 g/kw hr

CO: 3.5 g/kw hr

- (a) Exhaust opacity from compression ignition nonroad engines for which this subpart is applicable must not exceed: [40 CFR 89.113]

(1) 20 percent during the acceleration mode;

(2) 15 percent during the lugging mode; and

(3) 50 percent during the peaks in either the acceleration or lugging modes.

- (b) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I.

- (c) The following engines are exempt from this requirements:

(1) Single cylinder engines;

(2) Constant speed engines.

- e. Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified below: [40 CFR 60.4202(b)]

- i) For 2007-2010 Model Year Engines with a displacement of less than 10 liters per cylinder engines must comply with the emission standards for new nonroad CI engines as specified below:

##### **Emission Standards [40 CFR 60.4202(b)(1)]**

The Permittee shall comply with the emission standards for the diesel fired emergency generator (ID No. ESEDG) as follows:

HC: 1.3 (1.0) g/KW hr (g/HP hr)

NO<sub>x</sub>: 9.2 (6.9) g/KW hr (g/HP hr)

CO: 11.4 (8.5) g/KW hr (g/HP hr)

PM: 0.54 (0.40) g/KW hr (g/HP hr)

- ii) For 2011 model year and later, The Permittee shall use engines with emission standards engines as specified below: [40 CFR 60.4202(b)(2)]

##### **Emission Standards [40 CFR 89.112]**

The Permittee shall comply with the emission standards for the diesel fired emergency generator (ID No. ESEDG) as follows:

NMHC+NOX: 3.8 g/kw hr

PM: 0.12 g/kw hr

- (a) Exhaust opacity from compression ignition nonroad engines for which this subpart is applicable must not exceed: [40 CFR 89.113]

(1) 20 percent during the acceleration mode;

(2) 15 percent during the lugging mode; and

(3) 50 percent during the peaks in either the acceleration or lugging modes.

- (b) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I.

- (c) The following engines are exempt from this requirements:

- (1) Single cylinder engines;
- (2) Constant speed engines.

### **Emission Standards**

- d. The Permittee shall use diesel fuel in the emergency generator (ID No. ESEDG) that meets the following requirements: [40 CFR 60.4207(b)]
  - i. 15 ppm sulfur maximum, and
  - ii. A minimum cetane index of 40; or
  - iii. A maximum aromatic content of 35 volume percent.

### **Testing** [15A NCAC 2Q .0508(f)]

- e. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 G. 4. b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

### **Monitoring** [15A NCAC 2Q .0508(f)]

- f. The diesel fired emergency generator (ID No. ESEDG) shall be equipped with a non-resettable hour meter prior to startup. If the diesel fired emergency generator (ID No. ESEDG) is not equipped with a non-resettable hour meter prior to startup, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524. [40 CFR §60.4209(a)]
- g. The Permittee shall operate and maintain the emergency generator (ID No. ESEDG) in accordance with the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. The Permittee may only change engine settings that are permitted by the manufacturer. The Permittee shall also meet the requirements of 40 CFR § 89, 94 and/or 1068 as applicable. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the requirements in this Section are not complied with. [40 CFR §60.4211(a)]
- h. The Permittee may operate the emergency generator (ID No. ESEDG) for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by DAQ, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR §60.4211(e)]
- i. If the emergency generator (ID No. ESEDG) is equipped with diesel particulate filter to comply with the emission standards in Section 2.1 G. 4. c., above, the Permittee shall install backpressure monitor on diesel particulate filter that notifies the Permittee when the high backpressure limit of the engine is approached. If diesel particulate filter is not equipped with backpressure monitor or the Permittee is not monitoring the backpressure of diesel particulate filter, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524. [40 CFR §60.4209(b)]
- j. For 2007 or later must the Permittee shall only rent engine certified to meet the applicable emissions standards and must install and configure the engine according to the manufacturers specifications. [40 CFR §60.4211(c)]
- k. If the emergency generator (ID No. ESEDG) is equipped with diesel particulate filter, the Permittee shall keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if these records are not maintained. [§60.4214(e)]

### **Recordkeeping** [15A NCAC 2Q .0508(f)]

- l. The Permittee shall maintain a record of engine manufacturer data indicating compliance with the standards.
- m. Starting with model year 2011, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of the engine and the reason the engine was in operation during that time. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 for failure to follow the above procedure. [40 CFR 60.4214(b)]

### **Reporting** [15A NCAC 2Q .0508(f)]

- n. No initial notifications are required for emergency generator (ID No. ESEDG). [40 CFR §60.4214(b)]
- o. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit shall be clearly identified.

If any of the monitoring/recordkeeping requirements in Section 2.1 G. 4. f., through o., above are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

**H. Natural gas/No. 2 fuel oil-fired boilers (less than 10.0 million Btu per hour heat input, ID No. ESBRL1)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.295 pounds per million Btu heat input	15A NCAC 02D .0503
SO <sub>2</sub>	Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 2D .0516
Visible emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of list subject fuels, that are discharged from this source into the atmosphere shall not exceed 0.295 pounds per million Btu heat input. [15A NCAC 02D .0503(a)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 H. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- d. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas and No. 2 oil in this source.

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 H.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas/ /No. 2 fuel oil in this source.

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from this boiler (ID No. EESBLR1) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 H 3 a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- d. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas/No. 2



fuel oil in this source.

**I. Ceko air filter (ID No. CDFTR2) controlling emissions from:**

**Three laminate application pans (ID Nos. ESLA3, ESLA4, and ESLA5)**

**One 80 gallon laminate use tank (ID No. ESLAT6)**

**One 140 gallon laminate use tank (ID No. ESLAT7)**

**One 800 gallon laminate day tank (ID No. ESMA7)**

**One sealant applicator pan (ID No. ESSA6)**

**One 80 gallon sealant use tank (ID No. ESSEA6)**

**One 800 gallon sealant day tank (ID No. ESMA9)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<b>Affected Sources: Tanks (ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6).</b> Particulate emissions shall not exceed the rate prescribed by the process weight equations: For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$	15A NCAC 2D .0515
Visible emissions	<b>Affected Sources: Pans (ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6)</b> Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
Visible emissions	<b>Affected Sources: Tanks (ID Nos. ESLAT6, ESLAT7, and ESSEA6)</b> Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
HAPs	See Section 2.2 i. 1.(Multiple Emission Sources-MACT, Existing Affected Asphalt Processing Facility and Asphalt Roofing Manufacturing Lines.	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)
TAPs	See Section 2.2 iv. 1. (Multiple Emission Sources-Toxic Pollutant Exemption rates) <b>STATE ENFORCEABLE ONLY</b>	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) <b>STATE ENFORCEABLE ONLY</b>	15A NCAC 2D .1806

**1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from each affected source (**ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6**) shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour:

$$E = 4.10 \times P^{0.67}$$

Where:

E = allowable emission rate in pounds per hour, and

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

**Inspection/Maintenance Monitoring/Recordkeeping Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from each of the affected sources (**ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, each week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for the sources (ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6) in the first 30 days following the start up of the sources. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission sourcer in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 I.2.a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and,
  - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**3. 15A NCAC 2D .0524: NSPS UU - Asphalt Processing and Asphalt Roofing Manufacture**

- a. The Permittee comply with the emissions limits for the tanks (**ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6**) by complying with the emissions limit specified in Section 2.2.A.1. of this permit. [40 CFR 63.8681]

**Testing/Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- b. Pursuant to 40 CFR 63.8681, coaters and asphalt storage tanks that are subject to 40 CFR 60, Subpart UU and 40 CFR 63, Subpart LLLLL (Asphalt Roofing MACT) are only required to comply with the provisions of the MACT. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these requirements of Section 2.2.A.i., of this permit are not met.

**J. Nail paint line applicator for Line No. 1 (ID No. ESNLPA2)**

The following table provides a summary of limits and standards for the emission source described above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
TAPs	See Section 2.2 iv. 1. (Multiple Emission Sources-Toxic Pollutant Exemption rates) <b>STATE ENFORCEABLE ONLY</b>	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	See Section 2.2 iv. 2.. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3.. (Multiple Emission Sources-Odor Control requirements) <b>STATE ENFORCEABLE ONLY</b>	15A NCAC 2D .1806

## 2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

### i. MACT LLLLL-Affected Sources, as follows:

#### Asphalt Processing Facility (“Existing”)

Afterburner (ID No. CDAFB) on:

Blowstill No. 1 (ID No. ESBS1)

Blowstill No. 2 (ID No. ESBS2)

Blowstill No. 3 (ID No. ESBS3)

Mist Eliminator (ID No. CDME3) and Regenerative Thermal Oxidizer (ID No. CDRTO) -OR- Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:

No. 1 flux preheat tank (ID No. ESFT1)

No. 2 flux preheat tank (ID No. ESFT2)

No. 3 flux preheat tank (ID No. ESFT3)

Flux Storage Tank No. 1 (ID No. ESFST1)

Flux Storage Tank No. 2 (ID No. ESFST2)

Coating tank No. 1 (ID No. ESCT1)

Coating tank No. 2 (ID No. ESCT2)

Coating tank No. 3 (ID No. ESCT3)

Coating tank No. 4 (ID No. ESCT4)

Two asphalt flux storage tanks (ID Nos. ESFST3 and ESFST4)

#### Roofing Line No. 1 and Roofing Line No. 2 (“Existing”)

Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:

Line No. 1 fiberglass mat coater (ID No. ESLC1)

Line No. 2 fiberglass mat coater (ID No. ESLC2)

Modified asphalt recirculation tank (ID No. ESMA3)

Sealant day tank No. 1 (ID No. ESSEA1)

Sealant day tank No. 2 (ID No. ESSEA2)

Line No. 1 sealant applicator pan (ID No. ESSA1)

Line No. 2 sealant applicator pan (ID No. ESSA2)

Line No. 1 overlay inking pan (ID No. ESWIP1)

Modified sealant recirculation tank (ID No. ESMS2)

Limestone/asphalt mixer No. 1 (ID No. ESHM1)

Limestone/asphalt mixer No. 2 (ID No. ESHM2)

Mist Eliminator (ID No. CDME3) and Regenerative Thermal Oxidizer (ID No. CDRTO) -OR- Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:

No. 1 saturant tank (ID No. ESST1)

Sealant tank (ID No. ESSDT)

Coalescing Air Filter (ID No. CDFTR) on:

Line No. 2 laminating adhesive applicator wheel (ID No. ESLA1)

Line No. 2 sealant applicator gun (ID No. ESSA3)

Line No. 2 sealant applicator pan (ID No. ESSA4)

**Roofing Line No. 3 (“New”)**

**Mist Eliminator (ID No. CDME3) and Regenerative Thermal Oxidizer (ID No. CDRTO) on:**

- Line No. 3 AC-20 asphalt tank (ID No. ESAC20)**
- Line No. 3 fiberglass mat coater (ID No. ESLC3)**
- Line No. 3 laminate swell tank (ID No. ESMA8)**
- Line No. 3 laminate adhesive day tank (ID No. ESLAT3)**
- Line No. 3 sealant swell tank (ID No. ESMA10)**
- Line No. 3 sealant adhesive day tank (ID No. ESSEA3)**
- Line No. 3 sealant applicator (ID No. ESSA5)**
- Line No. 3 laminating adhesive applicator (ESLA2)**
- Line No. 3 horizontal mixer (ID No. ESHM3)**
- Line No. 3 vertical mixer (ID No. ESVM3)**

**Roofing Line No. 1 (“Existing”)**

**Ceco air filter (ID No. CDFTR2) controlling emissions from:**

- Three laminate application pans (ID Nos. ESLA3, ESLA4, and ESLA5)**
- One 80 gallon laminate use tank (ID No. ESLAT6)**
- One 140 gallon laminate use tank (ID No. ESLAT7)**
- One 800 gallon laminate day tank (ID No. ESMA7)**
- One sealant applicator pan (ID No. ESSA6)**
- One 80 gallon sealant use tank (ID No. ESSEA6)**
- One 800 gallon sealant day tank (ID No. ESMA9)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
HAPs	NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)

**1. 15A NCAC 2D .1111: Maximum Achievable Control Technology (MACT)**

**40 CFR Part 63 Subpart LLLLL (Asphalt Processing and Asphalt Roofing Manufacturing)**

- a. The Permittee shall comply with all applicable requirements of 15A NCAC 2D .1111 “Maximum Achievable Control Technology” and 40 CFR Part 63, Subpart LLLLL, “NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing.”
  - i. The particulate matter (PM) emissions shall be no greater than 0.08 lb/ton of asphalt shingle produced.

**Emissions Standards** [40 CFR 63.8684(a), 40 CFR 63.8685(a)]

- b. The Permittee shall use the afterburner (**ID No. CDAFB**) to control emissions from the affected sources listed below. The control device shall achieve a combustion efficiency of at least 99.5 percent except during periods of startup, shutdown, and malfunction.
  - i. Blowstill Nos. 1, 2, and 3 (**ID Nos. ESBS1, ESBS2, and ESBS3**).
- c. The Permittee shall use the regenerative thermal oxidizer (**ID No. CDRTO**) to control emissions from the affected sources listed below. The control device shall achieve a combustion efficiency of at least 99.5 percent except during periods of startup, shutdown, and malfunction.
  - i. Line No. 3 coater (**ID No. ESLC3**);
  - ii. Line No. 3 coating mixers (**ID Nos. ESHM3 and ESVM3**);
  - iii. Line No. 3 sealant applicator (**ID No. ESSA5**);
  - iv. Line No. 3 laminating adhesive applicator (**ID No. ESLA2**);
  - v. Group 2 storage tanks (**ID Nos. ESAC20, ESMA8, ESMA10, ESLAT3 and ESSEA3**); and,
  - vi. Group 2 storage tanks (**ID Nos. ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESCT1, ESCT2, ESCT3, ESCT4, ESST1, ESSDT, ESFST3 and ESFST4**) (alternatively, these tanks may be controlled as provided in Section 2.2.A.1.d.vi. below)
- d. The Permittee shall use the electrostatic precipitator (**ID No. CDESP**) or mist eliminator (**ID No. CDME**) to control emissions from the affected sources listed below. The control device shall limit particulate mater (PM) emissions to no greater than 0.08 lb/ton of asphalt shingle produced except during periods of startup, shutdown, and malfunction.
  - i. Line Nos. 1 and 2 coaters (**ID Nos. ESLC1 and ESLC2**);
  - ii. Line Nos. 1 and 2 coating mixers (**ID Nos. ESHM1 and ESHM2**);

- iii. Line Nos. 1 and 2 sealant applicators (**ID Nos. ESSA1 and ESSA2**);
- iv. Line No. 1 overlay inking pan (lamine applicator) (**ID No. ESWIP1**);
- v. Group 2 storage tanks (**ID Nos. ESMA3, ESMA5, ESSEA1, ESSEA2, and ESMS2**); and,
- vi. Group 2 storage tanks (**ID Nos. ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESCT1, ESCT2, ESCT3, ESCT4, ESST1, ESSDT, ESFST3 and ESFST4**) (alternatively, these tanks may be controlled as provided in Section 2.2.A.1.c.vi. above).

The particulate standard does NOT apply to the Group 2 storage tanks listed in v. and vi. above. However, the Group 2 storage tanks are affected by the visible emission standard provided in Section 2.2.A.1.g. below.

- e. The coalescing air filter (**ID No. CDFTR**) to control emissions from the affected sources listed below. The control device shall limit particulate matter (PM) emissions to no greater than 0.08 lb/ton of asphalt shingle produced except during periods of startup, shutdown, and malfunction.
  - i. Line No. 2 sealant applicators (**ID Nos. ESSA3 and ESSA4**); and,
  - ii. Line No. 2 laminate applicator (**ID No. ESLA1**).
- f. When used to control emissions from the Line No. 1 or Line No. 2 coater (**ID No. ESLC1 and ESLC2**), emissions from the electrostatic precipitator (**ID No. CDESP**) and/or mist eliminator (**ID No. CDME**) shall be limited as follows except during periods of startup, shutdown, and malfunction:
  - i. Visible emissions from the control device shall not exceed 20 percent opacity; and,
  - ii. Visible emissions from the capture system shall not exceed 20 percent opacity for any period of consecutive valid observations totaling 60 minutes.
- g. When used to control emissions from any Group 2 storage tank, visible emissions from the electrostatic precipitator (**ID No. CDESP**), mist eliminator (**ID No. CDME**), and/or coalescing air filter (**ID No. CDFTR**) shall be limited to no greater than 0 percent opacity except during periods of startup, shutdown, and malfunction. The opacity limit may be exceeded for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleared. During this 15-minute period, the control device must not be bypassed.
- h. i. When used to control emissions from any Group 2 storage tanks (**ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6**), visible emissions from the Ceco air filter (**ID No. CDFTR2**) shall be limited to no greater than 0 percent opacity except during periods of startup, shutdown, and malfunction. The opacity limit may be exceeded for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleared. During this 15-minute period, the control device must not be bypassed.
- ii. When used to control emissions from three laminate application pans (**ID Nos. ESLA3, ESLA4, and ESLA5**) and the one sealant applicator pan (**ID No. ESSA6**), particulate matter emissions from the Ceco air filter (**ID No. CDFTR2**) shall be limited to no greater than 0.08 lb/ton of asphalt shingle produced except during periods of startup, shutdown, and malfunction.

#### **Operating Limits** [40 CFR 63.8684(b), 40 CFR 63.8685(a)]

- i. Except during periods of startup, shutdown, and malfunction, the Permittee shall maintain the 3-hour average combustion temperature of the afterburner (**ID No. CDAFB**) at or above **1,565 1,463 degrees Fahrenheit**, or at or above the temperature established during the most recent test that demonstrated compliance with the emission standard, whenever the control device is being used to control emissions as provided in Section 2.2.A.1.1.b. above.
- j. Except during periods of startup, shutdown, and malfunction, the Permittee shall maintain the 3-hour average combustion temperature of the regenerative thermal oxidizer (**ID No. CDRTO**) at or above **1,590 degrees**, or the value established during the most recent test that demonstrated compliance with the emission standard, whenever the control device is being used to control emissions as provided in Section 2.2.A.1.1.c. above.
- k. If the electrostatic precipitator (**ID No. CDESP**) is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following except during periods of startup, shutdown, and malfunction:
  - i. 3-hour average inlet gas temperature at or below **113.3 degrees Fahrenheit**, or the value established during the most recent test that demonstrated compliance with the emission standard; and,
  - ii. 3-hour average pressure drop across of the device at or below **0.9 inches of H<sub>2</sub>O**, or the value established during the most recent test that demonstrated compliance with the emission standard.
- l. If the mist eliminator (**ID No. CDME**) is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following except during periods of startup, shutdown, and malfunction:
  - i. 3-hour average inlet gas temperature at or below **124.2 degrees Fahrenheit**, or the value established during the most recent test that demonstrated compliance with the emission standard; and,
  - ii. 3-hour average pressure drop across of the device at or below **19.6 inches of H<sub>2</sub>O**, or the value established during the most recent test that demonstrated compliance with the emission standard.

The 3-hour averages shall be based on periods during which the affected emissions sources are in operation.

- m. If the coalescing air filter (**ID No. CDFTR**) is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following except during periods of startup, shutdown, and malfunction:
  - i. 3-hour average inlet gas temperature at or below **118.7 degrees Fahrenheit**, or the value established during the most recent test that demonstrated compliance with the emission standard; and,
  - ii. 3-hour average pressure drop across of the device at or below **13.2 inches of H<sub>2</sub>O**, or the value established during the most recent test that demonstrated compliance with the emission standard.
- n. If the Ceko filter (**ID No. CDFTR2**) is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following except during periods of startup, shutdown, and malfunction:
  - i. 3-hour average inlet gas temperature at or below **103.4 degrees Fahrenheit**, or the value established during the most recent test that demonstrated compliance with the emission standard; and,
  - ii. 3-hour average pressure drop across of the device at or below **10.4 inches of H<sub>2</sub>O**, or the value established during the most recent test that demonstrated compliance with the emission standard.

**Testing** [40 CFR 63.8686-8687]

- o. i. If any emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.2.A.1.b. through h. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.
- ii. The Permittee must conduct performance tests within 180 days of start up of sources (ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6) and according to the requirements of 40 CFR 63.7(a)(2). [40 CFR 63.8686(c)]

**Monitoring/Recordkeeping** [40 CFR 63.8688]

- p. The Permittee shall install, operate, and maintain continuous monitoring systems (CMS) to measure and record the combustion chamber temperature at the afterburner (**ID No. CDAFB**) and the regenerative thermal oxidizer (**ID No. CDRTO**), as follows:
  - i. The monitors shall be located in a position that provides a representative temperature.
  - ii. The temperature sensors must have a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.
  - iii. If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.

The CMS must be operated and maintained according to the site-specific monitoring plan. If the CMS are not installed, operated, or maintained, or if the combustion chamber temperature falls below the requirement provided in Section 2.2.A.1.i. or j. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.
- q. The Permittee shall install, operate, and maintain continuous monitoring systems (CMS) to measure and record both the inlet gas temperature and the pressure drop across the electrostatic precipitator (**ID No. CDESP**), mist eliminator (**ID No. CDME**), and coalescing air filter (**ID No. CDFTR**):
  - i. The temperature monitors shall meet the following requirements:
    - A. The monitor shall be located in a position that provides a representative temperature.
    - B. The temperature sensor must have a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.
    - C. If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.
  - ii. The pressure monitors shall meet the following requirements:
    - A. Locate the pressure sensor(s) in, or as close as possible, to a position that provides a representative measurement of the pressure.
    - B. Use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range.

The CMS must be operated and maintained according to the site-specific monitoring plan. If the CMS is not installed, operated, or maintained, or if the inlet gas temperature or pressure drop across the control device exceed the maximum values provided in Section 2.2.A.1. k., l, or m, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.
- r. The following requirements apply to each continuous monitoring system (CMS) required above:
  - i. The CMS must complete a minimum of one cycle of operation for each successive 15-minute period.
  - ii. To determine the 3-hour average, the Permittee must:
    - A. Have a minimum of four successive cycles of operation to have a valid hour of data.
    - B. Have valid data from at least three of four equally spaced data values for that hour from a CMS that is not out-of-control according to the site-specific monitoring plan.
    - C. Determine the 3-hour average of all recorded readings for each operating day, except as stated in §63.8690(c). At least two of the three hourly averages for that period using only hourly average values

must be based on valid data (i.e., not from out-of-control periods).

iii. Data must be monitored and collected in accordance with 40 CFR 63.8690.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the above requirements are not met. [40 CFR 63.8688(a)(1)-(2), 40 CFR 63.8690]

**Site-Specific Monitoring Plan** [40 CFR 63.8685(d)]

- s. The Permittee shall develop and implement a written, site-specific monitoring plan for each monitoring system required above, including the content specified in of §63.8688(g)-(h), as follows:
  - i. A description of the installation of each continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
  - ii. Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;
  - iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations);
  - iv. Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
  - v. Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d); and,
  - vi. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).

Each CMS shall be in continuous operation in accordance with the monitoring plan upon startup. If the monitoring plan is not developed or the CMS is not operated and maintained according to the plan, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

- t. Retain a copy of the current site-specific monitoring plan on-site and make the plan available to the DAQ upon request. If the monitoring plan is not made available to DAQ, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

**CMS Inspection/Maintenance** [40 CFR 63.8688(a)(3), (b), (c), and (i)]

- u. The Permittee must conduct a performance evaluation of each continuous monitoring system (CMS) in accordance with the site-specific monitoring plan required in Section 2.2.A.1.r. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the required performance evaluation is not conducted.
- v. The following requirements apply to the continuous temperature monitors measuring the combustion chamber temperature **ID Nos. CDRTO and CDAFB** and the inlet gas temperatures for **ID Nos. CDESP, CDME, CDFTR2 and CDFTR**:
  - i. Perform an accuracy check using one of the following procedures at least semiannually or following an operating parameter deviation:
    - A. According to the procedures in the manufacturer's documentation;
    - B. By comparing the sensor output to redundant sensor output;
    - C. By comparing the sensor output to the output from a calibrated temperature measurement device; or,
    - D. By comparing the sensor output to the output from a temperature simulator.
  - ii. Conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.
  - iii. At least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

Record the results of each inspection, calibration, and validation check of the CMS. If the required checks are not conducted or the results of the checks are not recorded, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

- w. The Permittee shall perform regular inspections and maintenance of each required continuous pressure monitor for **ID Nos. CDESP, CDME, CDFTR2 and CDFTR**, including, at a minimum, the following:
  - i. Check pressure tap pluggage daily.
  - ii. Perform an accuracy check at least quarterly or following an operating parameter deviation:
    - A. According to the procedures in the manufacturer's documentation; or
    - B. By comparing the sensor output to redundant sensor output.
  - iii. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.
  - iv. At least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.
  - v. At least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.

Record the results of each inspection, calibration, and validation check of the CMS. If the required checks are not conducted or the results of the checks are not recorded, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

**Startups, Shutdowns, and Malfunctions** [40 CFR 63.8685(b)-(c), 40 CFR 63.8691(d)]

- x. At all times, including periods of startup, shutdown, and malfunction, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, the Permittee shall reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the Permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the Permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.
- y. Deviations that occur during a period of startup, shutdown, or malfunction are not violations if the Permittee demonstrates that the affected source(s) was(were) operating in accordance with Section 2.2.A.1.w. [40 CFR 63.6(e)(1)] of this permit. The DAQ will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in 40 CFR 63.6(e).
- z. The Permittee shall develop a written startup, shutdown, and malfunction (SSM) plan in accordance with §63.6(e)(3). Retain a copy of the current SSM plan on-site and make the plan available to the DAQ upon request. If the SSM plan is not made available to DAQ, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

**Reporting** [40 CFR 63.8693]

- aa. The Permittee shall submit semiannual compliance reports to DAQ postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The MACT compliance reports shall include the following information:
  - i. Company name and address;
  - ii. Responsible Official certification;
  - iii. Beginning and ending dates of the reporting period;
  - iv. For each deviation during the reporting period from any emission limit, operating limit, or visible emission/opacity limit, the report must contain the information in §63.8693(c);
  - v. For each period during which any continuous monitoring system (CMS) was out-of-control as specified in §63.8(c)(7), the report must contain the information in §63.8693(d); and,
  - vi. For each SSM event during the reporting period for which the Permittee took actions consistent with the SSM plan, including the information in §63.10(d)(5)(i).

If there were no deviations, SSM events, or out-of-control periods at any CMS during the reporting period, the compliance report shall include a statement to that affect.

**ii. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS**

**for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

**1. Reserved.**

**Sulfur Dioxide PSD Avoidance Limits**

- a. In order to avoid the applicability of 15A NCAC 2D .0530, the Permittee shall limit SO<sub>2</sub> emissions as follows:
  - i. Total SO<sub>2</sub> emissions from blowstills, coaters, and combustion sources installed prior to April 2005 when used to support production on Roofing Lines No. 1 (L1) and No. 2 (L2) shall not exceed 250 tpy; and,
  - ii. Total SO<sub>2</sub> emissions from coaters and combustion sources installed as part of the Roofing Line No. 3 (L3) installation and from blowstills and combustion sources installed prior to April 2005 when used to support production on L3 shall not exceed 250 tpy.

Sources affected by the above emissions limitations are listed in the table below:



Source ID No.	SO <sub>2</sub> Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [D <sub>L1+L2</sub> = Emissions Dedicated to Limit in Section 2.2. B. 1. a. i. ] [D <sub>L3</sub> = Emissions Dedicated to Limit in Section 2.2. B. 1. a. ii. ]
ESBS1, ESBS2, ESBS3	0.86 lb/ton asphalt	D <sub>L1+L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESLC1, ESLC2	0.08 lb/ton asphalt	D <sub>L1+L2</sub> = 1 D <sub>L3</sub> = 0
ESLC3	0.08 lb/ton asphalt	D <sub>L1+L2</sub> = 0 D <sub>L3</sub> = 1
CDRTO	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = 0 D <sub>L3</sub> = 1
CDAFB	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESPH1, ESPH2	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESSH1	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = 1 D <sub>L3</sub> = 0
ESB1, ESB2	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESSCH1, ESSCH2	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = 1 D <sub>L3</sub> = 0
ESSCH3	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = 0 D <sub>L3</sub> = 1
ESHOH2	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESHOH4	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = 0 D <sub>L3</sub> = 1
ESCMH1, ESCMH2	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESCMH3	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = 0 D <sub>L3</sub> = 1
ESLFH	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D <sub>L1+L2</sub> = 1 D <sub>L3</sub> = 0

S = Sulfur content of fuel oil in percent by weight (% by wt.)

Mgal = 1,000 gallons

MMscf = million standard cubic feet

#### **Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test show emissions greater than the emission factors shown in the table above, the Permittee shall apply for a permit modification to amend the factors used in determining compliance with the limit given in Section 2.2 B.1. a. i. or ii., above.

#### **Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- e. To demonstrate compliance with the SO<sub>2</sub> limits provided in Section 2.2 B.1. a. i. and ii., the Permittee shall keep monthly records of the following:
- the amount asphalt processed in the blowstills (**ID Nos. ESBS1, ESBS2, and ESBS3**) (in tons/month);
  - the amount of coating asphalt applied at the coaters on Roofing Lines No. 1 and No. 2 (**ID Nos. ESLC1, ESLC2**) (in tons/month);
  - the amount of coating asphalt applied at the coater on Roofing Line No. 3 (**ID No. ESLC3**) (in tons/month);
  - the quantity and type of fuel consumed at each of the affected combustion devices (**ID Nos. CDAFB,**

**CDRTO, ESPH1, ESPH2, ESSH1, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESHOH2, ESHOH4, ESCMH1, ESCMH2, ESCMH3, and ESLFH**) (in gallons/month or scf/month). The Permittee may allocate facility wide fuel usage to the affected combustion sources based on the maximum firing capacity of each unit;

v. the sulfur content of No. 2 fuel oil, low sulfur No. 6 fuel oil, and high sulfur No. 6 fuel oil consumed (in % by wt).

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records are not maintained.

d. The sulfur content of fuel oils shall be determined from fuel supplier certifications of the supplier tankage. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the fuel supplier certifications are not maintained.

e. Each month the Permittee shall determine the amount of SO<sub>2</sub> emitted to the atmosphere and contributing to the emission limitations provided in Section 2.2 B. 1. a. i. and ii. during the previous calendar month using Eqn. 1 and Eqn 2:

Eqn. 1:

$$E_{SO_2} = \frac{\sum_{\substack{(ESBS1,ESBS2,ESBS3 \\ ESLG,ESLC)}} EF_{ID} * Throughput * D_{L1,L2} + \sum_{\substack{(CDAFBESPH1,ESPH2,ESSH1,ESSH2,ESB1,ESB2, \\ ESSCH1,ESSCH2,ESHOH2,ESCMH1,ESCMH2,ESLFH)}} EF_{ID} * FuelUsage * D_{L1,L2}}{2,000 \text{ lb/ton}}$$

Eqn. 2:

$$E_{SO_2} = \frac{\sum_{\substack{(ESBS1,ESBS2, \\ ESB3,ESLC)}} EF_{ID} * Throughput * D_{L3} + \sum_{\substack{(CDAFB,CDRT, OESPH1,ESPH2,ESB1,ESB2, \\ ESSCH3,ESHOH2,ESCM1,ESCM2,ESCMH3,ESHOH4)}} EF_{ID} * FuelUsage * D_{L3}}{2,000 \text{ lb/ton}}$$

where:

$E_{SO_2}$  = Sulfur dioxide emissions (ton/month);

$EF_{ID}$  = SO<sub>2</sub> emission factor for the Source ID No. (as provided in table);

$D_{L1,L2}$  = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.1. a.i. (as provided in table); and,

$D_{L3}$  = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.1. a.ii. (as provided in table).

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records of the emissions calculations as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records are not maintained.

f. Each month the Permittee shall calculate the total SO<sub>2</sub> emissions from the affected sources for the previous consecutive 12 month period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records are not maintained or if the 12-month rolling SO<sub>2</sub> emissions are in exceedance of the limits given in Section 2.2 B.1.a. i. or ii., above.

#### **Reporting [15A NCAC 2Q .0508(f)]**

- g. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six month period between July and December and July 30 of each calendar year for the preceding six month period between January and June. The report shall include SO<sub>2</sub> emissions totals for each 12 month period for the previous 17 months.
- h. The Permittee shall submit an application for a permit modification each time an emission factor, as provided in the table above, is revised. Factors provided in U.S. EPA's AP 42 shall be excluded from this requirement (i.e., no permit modification is required for U.S. EPA AP 42 updates).

**2. Nitrogen Oxide Nonattainment New Source Review Avoidance Limits**

- a. In order to avoid the applicability of 15A NCAC 2D .0531, the Permittee shall limit NO<sub>x</sub> emissions as follows:
- Total NO<sub>x</sub> emissions from blowstills and combustion sources installed prior to April 2005 when used to support production on Roofing Lines No. 1 (L1) and No. 2 (L2) shall not exceed 100 tpy; and,
  - Total NO<sub>x</sub> emissions from combustion sources installed as part of the Roofing Line No. 3 (L3) installation *and* from blowstills and combustion sources installed prior to April 2005 when used to support production on L3 shall not exceed 100 tpy.

Sources affected by the above emissions limitations are listed in the table below:

Source ID No.	NO <sub>x</sub> Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [D <sub>L1,L2</sub> = Emissions Dedicated to Limit in Section 2.2. B. 2. a. i. ] [D <sub>L3</sub> = Emissions Dedicated to Limit in Section 2.2. B. 2. a. ii. ]
ESBS1, ESBS2, ESBS3	0.06 lb/ton asphalt	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
CDRTO	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = 0 D <sub>L3</sub> = 1
CDAFB	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESPH1, ESPH2	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESSH1	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = 1 D <sub>L3</sub> = 0
ESB1, ESB2	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESSCH1, ESSCH2	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = 1 D <sub>L3</sub> = 0
ESSCH3	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = 0 D <sub>L3</sub> = 1
ESHOH2	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESHOH4	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = 0 D <sub>L3</sub> = 1
ESCMH1, ESCMH2	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESCMH3	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = 0 D <sub>L3</sub> = 1
ESLFH	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D <sub>L1,L2</sub> = 1 D <sub>L3</sub> = 0

Mgal = 1,000 gallons

MMscf = million standard cubic feet

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test show emissions greater than the emission factors shown in the table above, the Permittee shall apply for a permit modification to amend the factors used in determining compliance with the limit given in Section 2.2 B.2. a. i. or ii., above.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. To demonstrate compliance with the NO<sub>x</sub> limit provided in Section 2.2 B.2. a. i. and ii., the Permittee shall keep monthly records of the following:
- the amount asphalt processed in the blowstills (**ID Nos. ESBS1, ESBS2, and ESBS3**) (in tons/month);
  - the amount of coating asphalt applied at the coaters on Roofing Lines No. 1 and No. 2 (**ID Nos. ESLC1,**

**ESLC2)** (in tons/month);

- iii. the amount of coating asphalt applied at the coater on Roofing Line No. 3 (**ID No. ESLC3**) (in tons/month); and,
- iv. the quantity and type of fuel consumed at each of the affected combustion devices (**ID Nos. CDAFB, CDRTO, ESPH1, ESPH2, ESSH1, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESHOH2, ESHOH4, ESCMH1, ESCMH2, ESCMH3, and ESLFH**) (in gallons/month or scf/month). The Permittee may allocate facility-wide fuel usage to the affected combustion sources based on the maximum firing capacity of each unit.

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .05304 if the records are not maintained.

- d. Each month the Permittee shall determine the amount of NO<sub>x</sub> emitted to the atmosphere from the affected sources during the previous calendar month using Eqn. 3 and Eqn. 4:

Eqn. 3:

$$E_{NO_x} = \frac{\sum_{(ESB1, ESB2, ESB3)} EF_{ID} * Throughput * D_{L1,L2} + \sum_{(CDAFB, ESPH1, ESPH2, ESSH1, ESSH2, ESB1, ESB2, ESSCH1, ESSCH2, ESHOH2, ESCMH1, ESCMH2, ESLFH)} EF_{ID} * FuelUsage * D_{L1,L2}}{2,000 lb/ton}$$

Eqn. 4:

$$E_{NO_x} = \frac{\sum_{(ESB1, ESB2, ESB3)} EF_{ID} * Throughput * D_{L3} + \sum_{(CDAFB, CDRTO, ESPH1, ESPH2, ESB1, ESB2, ESSCH3, ESHOH2, ESCM1, ESCM2, ESCM3, ESHOH4)} EF_{ID} * FuelUsage * D_{L3}}{2,000 lb/ton}$$

where:

- E<sub>NO<sub>x</sub></sub> = NO<sub>x</sub> emissions (ton/month);
- EF<sub>ID</sub> = NO<sub>x</sub> emission factor for the Source ID No. (as provided in table);
- D<sub>L1,L2</sub> = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.2. a. i. (as provided in table); and,
- D<sub>L3</sub> = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.2. a. ii. (as provided in table).

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records of the emissions calculations as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .05304 if the records are not maintained.

- e. Each month the Permittee shall calculate the total NO<sub>x</sub> emissions from the affected sources for the previous consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .00531 if the records are not maintained or if the 12-month rolling NO<sub>x</sub> emissions are in exceedance of the limit given in Section 2.2 B.2. a. i. or ii., above.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall include NO<sub>x</sub> emissions totals for each 12-month period for the previous 17 months.
- g. The Permittee shall submit an application for a permit modification each time an emission factor, as provided in the table above, is revised. Factors provided in U.S. EPA's AP-42 shall be excluded from this requirement (i.e., no permit modification is required for U.S. EPA AP-42 updates).

### 3. Volatile Organic Compound Nonattainment New Source Review Avoidance Limits

- a. In order to avoid the applicability of 15A NCAC 2D .0531, the Permittee shall limit VOC emissions as follows:
- Total VOC emissions from blowstills, horizontal mix tanks, coaters, cooling sections, coating tanks, and combustion sources installed prior to April 2005 when used to support production on Roofing Lines No. 1 (L1) and No. 2 (L2) shall not exceed 92 tpy; and,
  - Total VOC emissions from the horizontal and vertical mix tanks, coater, cooling section, and combustion sources installed as part of the Roofing Line No. 3 (L3) installation *and* blowstills, coating tanks, and combustion sources installed prior to April 2005 when used to support production on L3 shall not exceed 99 tpy.

Sources affected by the above emissions limitations are listed in the table below:

Source ID No.	VOC Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [D <sub>L1,L2</sub> = Emissions Dedicated to Limit in Section 2.2. B. 3. a. i. ] [D <sub>L3</sub> = Emissions Dedicated to Limit in Section 2.2. B. 3. a. ii. ]
ESBS1, ESBS2, ESBS3	0.41 lb/ton asphalt	$D_{L1,L2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
ESHM1, ESHM2	w/ CDESP: 0.278 lb/ton asphalt w/ CDME: 0.278 lb/ton asphalt	$D_{L1,L2} = 1$ $D_{L3} = 0$
ESHM3	0.039 lb/ton asphalt	$D_{L1,L2} = 0$ $D_{L3} = 1$
ESVM3	0.007 lb/ton asphalt	$D_{L1,L2} = 0$ $D_{L3} = 1$
ESLC1, ESLC2	w/ CDESP: 0.208 lb/ton asphalt w/ CDME: 0.208 lb/ton asphalt	$D_{L1,L2} = 1$ $D_{L3} = 0$
ESLC3	0.029 lb/ton asphalt	$D_{L1,L2} = 0$ $D_{L3} = 1$
ESCS1, ESCS2	0.023 lb/ton asphalt	$D_{L1,L2} = 1$ $D_{L3} = 0$
ESCS3	0.023 lb/ton asphalt	$D_{L1,L2} = 0$ $D_{L3} = 1$
ESINK	N/A (VOC Usage)	$D_{L1,L2} = 1$ $D_{L3} = 0$
ESINK2	N/A (VOC Usage)	$D_{L1,L2} = 0$ $D_{L3} = 1$
ESNLPA	N/A (VOC Usage)	$D_{L1,L2} = 0$ $D_{L3} = 1$
ESCT1, ESCT2, ESCT3	w/ CDESP: 0.265 lb/ton asphalt w/ CDME: 0.265 lb/ton asphalt w/ CDRTO: 0.037 lb/ton asphalt	$D_{L1,L2} = 1$ $D_{L3} = 0$
ESCT4	w/ CDESP: 0.265 lb/ton asphalt w/ CDME: 0.265 lb/ton asphalt w/ CDRTO: 0.037 lb/ton asphalt	$D_{L1,L2} = 0$ $D_{L3} = 1$
CDRTO	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	$D_{L1,L2} = 0$ $D_{L3} = 1$
CDAFB	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	$D_{L1,L2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
ESPH1, ESPH2	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	$D_{L1,L2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
ESSH1	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	$D_{L1,L2} = 1$ $D_{L3} = 0$
ESB1, ESB2	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	$D_{L1,L2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
ESSCH1, ESSCH2	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	$D_{L1,L2} = 1$ $D_{L3} = 0$

Source ID No.	VOC Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [D <sub>L1,L2</sub> = Emissions Dedicated to Limit in Section 2.2. B. 3. a. i. ] [D <sub>L3</sub> = Emissions Dedicated to Limit in Section 2.2. B. 3. a. ii. ]
ESSCH3	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D <sub>L1,L2</sub> = 0 D <sub>L3</sub> = 1
ESHOH2	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESHOH4	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D <sub>L1,L2</sub> = 0 D <sub>L3</sub> = 1
ESCMH1, ESCMH2	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D <sub>L1,L2</sub> = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D <sub>L3</sub> = (L3 Coating Usage) / (Total Coating Usage)
ESCMH3	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D <sub>L1,L2</sub> = 0 D <sub>L3</sub> = 1
ESLFH	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D <sub>L1,L2</sub> = 1 D <sub>L3</sub> = 0

Mgal = 1,000 gallons

MMscf = million standard cubic feet

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test show emissions greater than the emission factors shown in the table above, the Permittee shall apply for a permit modification to amend the factors used in determining compliance with the limit given in Section 2.2 B.3. a. i. or ii., above.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. To demonstrate compliance with the VOC limit provided in Section 2.2 B.3. a. i. or ii., the Permittee shall keep monthly records of the following:
- the amount asphalt processed in the blowstills (**ID Nos. ESBS1, ESBS2, and ESBS3**) (in tons/month);
  - the amount of coating asphalt applied at the coaters on Roofing Lines No. 1 and No. 2 (**ID Nos. ESLC1, ESLC2**) (in tons/month);
  - the amount of coating asphalt applied at the coaters on Roofing Line No. 3 (**ID No. ESLC3**) (in tons/month);
  - the quantity and VOC content of each type of coating used at the printing operations (**ID Nos. ESINK, ESINK2, and ESNLPA**);
  - the period (i.e., start-time and stop time) that each of the Roofing Line No. 1 and No. 2 control devices (**ID Nos. CDRTO, CDESP, and CDME**) was used, and the corresponding coating asphalt throughputs at each of the three roofing lines during the period; and,
  - the quantity and type of fuel consumed at each of the affected combustion devices (**ID Nos. CDAFB, CDRTO, ESPH1, ESPH2, ESSH1, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESHOH2, ESHOH4, ESCMH1, ESCMH2, ESCMH3, and ESLFH**) (in gallons/month or scf/month). The Permittee may allocate facility-wide fuel usage to the affected combustion sources based on the maximum firing capacity of each unit.

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D . 0531 if the records are not maintained.

- d. Each month the Permittee shall determine the amount of VOC emitted to the atmosphere from the affected sources during the previous calendar month using Eqn. 5 and Eqn. 6:

Eqn. 5:

$$E_{VOC} = \frac{\sum_{(ESBS1,ESBS2,ESBS3,ESBM,ESHM2,ESLC1,ESLC2,ESCS1,ESCS2,ESCT1,ESCT2,ESCT3)} EF_{ID} * Throughput * D_{L1,L2} + \sum_{(CDAFBESPH1,ESPH2,ESSH1,ESSH2,ESB1,ESB2,ESSCH1,ESSCH2,ESHOH2,ESCMH1,ESCMH2,ESLPH)} EF_{ID} * FuelUsage * D_{L1,L2} + \sum_{(ESINK)} Q_i * \frac{C_i}{100}}{2,000 lb/ton}$$

Eqn. 6:

$$E_{VOC} = \frac{\sum_{(ESBS1,ESBS2,ESBS3,ESBM,ESVM3,ESLC3,ESCS3,ESCT4)} EF_{ID} * Throughput * D_{L3} + \sum_{(CDAFBESPH1,ESPH2,ESB1,ESB2,ESSCH3,ESHOH2,ESCM1,ESCM2,ESCMH3,ESHOH4)} EF_{ID} * FuelUsage * D_{L3} + \sum_{(ESINK2,ESNLPA)} Q_i * \frac{C_i}{100}}{2,000 lb/ton}$$

where:

- $E_{VOC}$  = VOC emissions (ton/month);  
 $EF_{ID}$  = VOC emission factor for the Source ID No. (as provided in table);  
 $D_{L1,L2}$  = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.3. a. i. (as provided in table);  
 $D_{L3}$  = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.3. a. ii. (as provided in table);  
 $Q_i$  = Quantity of coating (i) consumed at the affected printing operation(s) (in gal/month); and,  
 $C_i$  = VOC content of the coating (i) (in % by weight).

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records of the emissions calculations as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records are not maintained.

- e. Each month the Permittee shall calculate the total VOC emissions from the affected sources for the previous consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records are not maintained or if the 12-month rolling VOC emissions are in exceedance of the limit given in Section 2.2 B. 3. a. i. or ii., above.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall include VOC emissions totals for each 12-month period for the previous 17 months.
- g. The Permittee shall submit an application for a permit modification each time an emission factor, as provided in the table above, is revised. Factors provided in U.S. EPA's AP-42 shall be excluded from this requirement (i.e., no permit modification is required for U.S. EPA AP-42 updates).

**4. 15A NCAC 2Q.0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2D.0530: PREVENTION OF SIGNIFICANT DETERIORATION**

**PM<sub>10</sub> PSD Avoidance Limits**

- a. In order to avoid the applicability of 15A NCAC 2D .0530, the Permittee shall limit PM<sub>10</sub> emissions from the entire facility to less than 250 tons per year based on a 12-month rolling average.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508 (f)]

- b. To ensure compliance with the above limit the Permittee shall keep monthly records of the total asphalt processed through the three blowstills (ESBS1 through ESBS3). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the asphalt processed through the three blowstills are not recorded or if the 12-month rolling total asphalt processed from the three blowstills (ESBS1 through ESBS3) is greater than 350,000 tons per year.

**Reporting** [15A NCAC 2Q .0508(f)]

- b. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of



monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

- i. The monthly total asphalt processed from the three blowstills (ESBS1 through ESBS3) for the previous 17 months.

### **STATE-ENFORCEABLE ONLY**

#### **iii. 15A NCAC 2D .1100: TOXIC AIR POLLUTANT EMISSIONS LIMITATIONS**

- a. Pursuant to 15A NCAC 2D .1100 "Control of Toxic Air Pollutants," and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

<b>Toxic Air Pollutant</b>	<b>Emission Limits</b>
Arsenic and Inorganic Arsenic Compounds <sup>(1)</sup>	18.4 lb/yr
Benzene <sup>(2)</sup>	4,021 lb/yr
1,3 Butadiene <sup>(2)</sup>	4,329 lb/yr
Cadmium and Compounds <sup>(1)</sup>	458 lb/yr
Chlorine <sup>(1)</sup>	125 lb/hr 519 lb/day
Formaldehyde <sup>(2); (3)</sup>	33.57 lb/hr
Hydrogen Chloride <sup>(2)</sup>	89.58 lb/hr
Nickel <sup>(1)</sup>	82.6.58 lb/hr
Vinyl Chloride <sup>(1)</sup>	31,600 lb/yr

<sup>(1)</sup> Affected sources: ESBS1, ESBS2, ESBS3, ESLA3, ESLA4, ESLA5, ESLAT6, ESLAT7, ESSA6, ESSEA6, and ESNLPA2

<sup>(2)</sup> Affected sources: ESBS1, ESBS2, ESBS3, ESHM1, ESHM2, ESMA1, ESMA3, ESMA2, ESLC1, ESLC2, ESSEA2, ESMS2, ESSA1, ESSA2, ESFST1, ESSEA1, ESCT1, ESCT2, ESCT3, ESCT4, ESFST1, ESFST2, ESFT1, ESFT2, ESFT3, ESST1, ESSDT, ESCS1, ESCS2, ESLA1, ESSA3, ESSA4, ESHM3, ESVM3, ESLC3, ESLA2, ESLAT3, ESLAT4, ESSA6, ESSEA3, ESSEA4, ESAC20, ESMA8, ESMA10, ESFST3, ESFST4, ESLA3, ESLA4, ESLA5, ESLAT6, ESLAT7, ESSA5, ESSEA6, and ESNLPA2

<sup>(3)</sup> Affected source: L8, ESLA3, ESLA4, ESLA5, ESLAT6, ESLAT7, ESSA6, ESSEA6, and ESNLPA2

- i. The Permittee shall demonstrate compliance with the above limitations as follows:
  - i. No monitoring, recordkeeping, or reporting is required for uncontrolled emission sources (**ID Nos. ESCS1, ESCS2, ESCS3, and L8**).
  - ii. For all other affected emission sources, the Permittee shall comply with the applicable standards, monitoring, and recordkeeping requirements provided in Section 2.2.A.1. of this permit.

#### **IV. Facility-Wide**

### **STATE-ENFORCEABLE ONLY**

#### **1. 15A NCAC 2Q .0705: EXISTING FACILITIES AND SIC CALLS and**

#### **15A NCAC 2Q .0711: TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT**

- a. As of the last update on **April 19, 2005**, emissions of toxic air pollutants have been demonstrated on a facility wide basis (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 2Q .0711 "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" as described elsewhere in Section 2.2.C. of this permit.
- b. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in 15A NCAC 2Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 2Q .0711 without first obtaining an air permit to construct or operate.
- c. PRIOR to exceeding any of the TPERs listed in 15A NCAC 2Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".
- d. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 2Q .0711.
- e. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required



pursuant to 15A NCAC 2Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Acetaldehyde				6.8
Acetic Acid				0.96
Aerolein				0.02
Methyl Ethyl Ketone		78		22.4
Benzo(a)pyrene	2.2			
Beryllium	0.28			
Chloroform	290			
Di(2-ethylhexyl)phthalate		0.63		
n-Hexane		23		
Manganese and compounds		0.63		
Methyl chloroform		250		64
Methylene chloride	1,600		0.39	
Phenol			0.24	
Toluene		98		14.4
Xylene		57		16.4

**1. 15A NCAC 2D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS**

- a. Pursuant to 15A NCAC 2D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions, and whose emissions of VOC are greater than 15 pounds per day; the Permittee shall:
  - i. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
  - ii. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
  - iii. store wipe rags containing volatile organic compounds in closed containers,
  - iv. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
  - v. transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
  - vi. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 2D .0958(c)]
- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
  - i. flush parts in the freeboard area,
  - ii. take precautions to reduce the pooling of solvent on and in the parts,
  - iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
  - iv. not fill cleaning machines above the fill line,
  - v. not agitate solvent to the point of causing splashing. [15A NCAC 2D .0958(d)]

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance with paragraphs a and b above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing volatile organic compounds. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the inspections shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each inspection; and
  - the results of each inspection noting whether or not noncompliant conditions were observed.
- If the required records are not maintained the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**STATE-ENFORCEABLE ONLY**

**2. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

## 2.3- Compliance Assurance Monitoring

**1. 15A NCAC 2D .0614: Compliance Assurance Monitoring (40 CFR 64)**

- a. The Permittee must ensure that PM<sub>10</sub> emitted from the sources ESBS1, ESBS2, ESBS3, ESHM1, ESHM3, and ESLC3 are controlled by the afterburner (CDAFB), electrostatic precipitator (CDESP), mist eliminator (CDME), and regenerative thermal oxidizer (CDRTO) by monitoring the following operating parameter:
- Combustion temperature for the afterburner (CDAFB) and regenerative thermal oxidizer (CDRTO) and
  - Pressure drop for the electrostatic precipitator (CDESP) and mist eliminator (CDME).

**Monitoring Approach.**

- b. The key element of the monitoring approach are presented in the following table:

Indicator [64.6(c)(1)(i)]	Combustion temperature for CDAFB and CDRTO	Pressure Drop for CDESP and CDME
Measurement Approach [64.6(c)(1)(ii)]	Temperatures is indicated by a continuous monitoring systems (CMS) as per requirements of 2.2 i. 1., of this permit.	Temperature and Pressure are indicated by a continuous monitoring systems (CMS) as per requirements of 2.2 i. 1. k. ii., of this permit for (CDESP) and as per requirements of 2.2 i. 1. ii, of this permit for (CDME)
Indicator Range [64.6(c)(2)]	<p>An excursion is defined as a 3-hour block average value of:</p> <p>An excursion is defined as a 30-minute sustained value of:</p> <ol style="list-style-type: none"> <li>at or below 1,565 1,463 degrees Fahrenheit for (ID No. CDAFB) and</li> <li>at or below 1,590 degrees Fahrenheit for (ID No. CDRTO),</li> </ol> <p>as per requirements of 2.2 i. 1., of this permit.</p>	<p>An excursion is defined as a 3-hour block average value of:</p> <p>An excursion is defined as a 1-hour sustained value of:</p> <ol style="list-style-type: none"> <li>at or above 0.9 inches of H<sub>2</sub>O for (CDESP) and</li> <li>at or above 19.6 inches of H<sub>2</sub>O for (CDME)</li> </ol> <p>as per requirements of 2.2 i. 1. k. And 2.2 i. 1. l., of this permit.</p>

	An alarm will sound prior to reaching an excursion level.	An alarm will sound prior to reaching an excursion level.
	Excursions trigger an inspection, corrective action, and a reporting requirement.	Excursions trigger an inspection, corrective action, and a reporting requirement.
Quality Improvement Plan (QIP) Threshold [64.8]	Six excursion, as defined above, within any 6-month period.	Six excursion, as defined above, within any 6-month period.
QA/QC Practices and Criteria [64.3(b)(3)]	The CMS are calibrated as per the requirements of 2.2 i. 1., of this permit.	The CMS are calibrated as per the requirements of 2.2 i. 1., of this permit
Monitoring Frequency [64.3(b)(4)]	Temperature is monitored every 15 minutes as per the requirements of 2.2 i. 1., of this permit while control devices are in operation.	Temperature and Pressure are monitored every 15 minutes as per the requirements of 2.2 i. 1., of this permit while control devices are in operation.

**Recordkeeping and Reporting** [15A NCAC 2Q .0508(f) and 40 CFR § 64.9]

- c. The Permittee must retain records of recorded CMS data, each excursion report, and each corrective action taken. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if these records are not retained.
- d. Semi-annual compliance reports must cover the semiannual reporting period from January 1 through June 30 and the semiannual reporting period from July 1 through December 31. Each compliance report must be postmarked or delivered no later than July 30 or January 30, whichever date is the first date following the end of the semiannual reporting period. The compliance report must contain the following information:
  - i. Company name and address,
  - ii. a statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report,
  - iii. the date of report and beginning and ending dates of the reporting period,
  - iv. a statement that there were no excursion outside of the allowable operating parameter limits during the reporting period (as applicable), and that no continuous parametric monitoring system (CPMS) was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted. Or for each exceedance of an allowable operating parameter that occurs, the compliance report must contain:
    - (a) the total operating time of the source during the reporting period, and
    - (b) information on the number, duration, and cause of exceedances (including unknown cause), if applicable, and the corrective action taken.
    - (c) information on the number, duration, and cause for COMS downtime incidents, if applicable, other than downtime associated with zero and span and other daily calibration checks,

## SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

**A. General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.

6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance  
North Carolina Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]  
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]  
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]  
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]  
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]  
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

**H. Changes Not Requiring Permit Modifications****1. Reporting Requirements**

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

**2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]**

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
  - i. the changes are not a modification under Title I of the Federal Clean Air Act;
  - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
  - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
  - iv. the Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
  - i. a description of the change;
  - ii. the date on which the change will occur;
  - iii. any change in emissions; and
  - iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

**3. Off Permit Changes [15A NCAC 02Q .0523(b)]**

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.

**4. Emissions Trading [15A NCAC 02Q .0523(c)]**

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

**I.A Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]**

**"Excess Emissions"** - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

**"Deviations"** - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

**Excess Emissions**

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:

- i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
  - name and location of the facility;
  - nature and cause of the malfunction or breakdown;
  - time when the malfunction or breakdown is first observed;
  - expected duration; and
  - estimated rate of emissions;
- ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
- iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

#### Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

#### **I.B. Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

#### **J. Emergency Provisions [40 CFR 70.6(g)]**

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

#### **K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]**

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless

a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.

3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.



Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if

the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

**KK. Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

**LL. Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

**MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY**

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

**NN. Specific Permit Modifications [15A NCAC 02Q.0501 and .0523]**

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

**OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]**

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

## ATTACHMENT

**List of Acronyms**

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CAA</b>	Clean Air Act
<b>CAIR</b>	Clean Air Interstate Rule
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>DAQ</b>	Division of Air Quality
<b>DEQ</b>	Department of Environmental Quality
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NAA</b>	Non-Attainment Area
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAP</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound